

State of Michigan

Department of Technology, Management & Budget

Information, Communications and Technology (ICT) Strategy
Technical Advisory Services

Prepared for



Deliverable G — Final Report
28 March 2012

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Executive Summary

Objectives and Approach

Executive Summary — Objectives and Approach

Background and Overview

- During the last 10 years, the State of Michigan's ICT Department became one of only a handful of states to consolidate IT services into one agency. This reorganization has positioned the State to successfully maximize economies of scale for IT operations and has enabled some innovative point solutions that have been nationally recognized by independent organizations.
- However, as the State has matured its IT capabilities, political and economic climate changes have forced government organizations to re-evaluate how they conduct business. As governments worldwide are faced with decreasing capital, skills drain and growing uncertainty regarding the future, IT-intensive initiatives have increased in importance, with a focus on increased efficiency and toward financial sustainability of services and operations. Additionally, technological advances in mobile devices and social media have redefined citizen expectations for how and “how fast” they interact with government.
- To appropriately adapt to these changes, the State engaged Gartner to conduct a comprehensive IT Assessment to identify areas of improvement, untapped opportunities and other means to become a more efficient and effective IT service provider and help transform the State of Michigan in line with the Governor's vision.

Executive Summary — Objectives and Approach

Background and Overview (Cont'd)

- Specifically, the intended outcomes of this initiative, as defined by the State, were to:
 - Improve customer service;
 - Implement a successful, sustainable and innovative governance model;
 - Reduce Michigan's cost of procuring, implementing, operating, upgrading and replacing ICT infrastructure products, applications and services;
 - Increase attraction, retention and development of the SOM ICT workforce;
 - Enable cost savings and better government through shared solutions and cross-boundary partnerships; and
 - Implement best-practice ICT solutions and technologies.

Executive Summary — Objectives and Approach

Gartner Approach

- To help define the path for the State to achieve these transformative outcomes, Gartner executed a series of major tasks and produced key deliverables that culminated in the final report. In addition to a summary of the analysis, recommendations and road map, this deliverable contains a change management and communications plan, followed by summaries of each deliverable.

Plan	Analyze				Strategize		
	Major Tasks						
Project Plan and Management	Baseline Assessment	State Business Needs	Business, Services and Technology Opportunities	Maturity and Gap Analysis	Recommend	Road Map	Final Report
	Key Activities						
<ul style="list-style-type: none"> Project Planning and Orientation Project Kickoff Data Collection Planning and Tools Overview Finalize Project Work Plan Finalize Project Communication and Administrative Activities 	<ul style="list-style-type: none"> Initiate data-collection instruments (surveys, BM templates, documents) Conduct business and IT interviews Understand MI ICT's vision, and service and operating models Document Current State Environment Report 	<ul style="list-style-type: none"> Review current and future ICT needs and priorities based on current state evaluation and analysis of ICT strategies and IT leaders' future vision Aggregate and summarize business and technology interviews into business needs Develop State Business Needs Report 	<ul style="list-style-type: none"> Define viable business, services and technology improvement scenarios Identify potential risks and mitigation strategies Analyze improvement scenarios against MI requirements to determine viability Identify shared-services opportunities 	<ul style="list-style-type: none"> Integrate comprehensive analysis and assessments Evaluate IT capabilities against peers utilizing benchmarking analysis for Technology, People and Processes, and Capabilities Evaluate IT capabilities to meet State business direction, vision and goals 	<ul style="list-style-type: none"> Develop Business Model and Technology Solutions recommendations Expand recommendations and provide additional detail and due diligence Review recommendations with Governor's office, DTMB and IT advisors 	<ul style="list-style-type: none"> Develop implementation strategy and plan 	<ul style="list-style-type: none"> Develop Final Report Develop Recommendations Summary Presentation Develop Communications Plan Develop Change Management Plan Conduct Executive Presentation
	Deliverables						
<ul style="list-style-type: none"> Final Project Plan Status Reports (ongoing) 	<ul style="list-style-type: none"> Deliverable A — Evaluation of Current State Environment Deliverable B — Evaluation of the State's Business Needs Deliverable C — Identification of Business, Services and Technology Opportunities Deliverable D — Maturity and Gap Analysis 				<ul style="list-style-type: none"> Deliverable E — Recommendations for Business Model Alternatives Deliverable F — Road Map to Implementation Deliverable G — Final Report and Executive Presentation 		
	How well does DTMB currently operate?	Which current and future needs must DTMB address?	Which opportunities can DTMB capitalize on?	Which gaps and areas of improvement can DTMB address?	Which investments and activities does Gartner recommend?	How does the State implement the recommendations?	How do we best communicate the plan for action to stakeholders?

Executive Summary — Objectives and Approach

Gartner Deliverable Descriptions

Deliverable	Deliverable Description
Analyze Phase	
Deliverable A – Evaluation of Current State Environment	Deliverable A provides the technology, organization, process, strategy and service level (TOPSS) maturity assessment for the ITScore roles in the State.
Deliverable B – Evaluation of the State’s Business Needs	Deliverable B provides the observed statewide, shared, agency-specific and local government needs that Gartner captured during customer interviews. It also includes the results of the IT Business Effectiveness (ITBE) survey that was administered to each agency.
Deliverable C – Identification of Business, Service and Technology Opportunities	Deliverable C uses transformation drivers (external societal, technology and industry trends) and transformation enablers (DTMB strategic and internal improvement opportunities) to identify the capabilities that DTMB must have in order to take advantage of a changing environment.
Deliverable D – Maturity and Gap Analysis	Deliverable D identifies where the State should target to be in the TOPSS maturity assessment relative to their current rating and provides high-level recommendations for closing the gaps in the ratings.
Strategize Phase	
Deliverable E – Recommendations for Business Model Alternatives	Deliverable E documents the high-level DTMB strategic vision and the four strategic goals necessary to realize that vision. Each goal has a specific set of recommendations and recommendation requirements for the State.
Deliverable F – Roadmap to Implementation	Deliverable F uses the recommendations and the improvement opportunities for the State to create a list of specific projects and programs that are sequenced by priority and projected resource availability.
Deliverable G – Final Report	Deliverable G is a summary report of all previous deliverables.

Executive Summary

Summary of Findings

Executive Summary — Summary of Findings

Overview

- Through quantitative and qualitative analyses, Gartner witnessed a pattern within the data and findings that suggested that DTMB has been reactive, but efficient, from an ICT perspective.
- While ICT spending is lower than peers, as would be expected to some extent, given that ICT is centralized in the State of Michigan, the preponderance of IT spend on operational expenses suggests a focus on “keeping the lights on” that limits strategic investment in ICT.
- As expected, ICT head count is lower than peers, and DTMB skill sets for operational and technical staff are highly proficient, which has led to nationally recognized instances of technical innovation.
- However, the average cost of ICT resources (internal and external) was exceedingly high compared to peers, partially driven by use of high-priced contractors in reaction to staff retirement.
- On the other hand, key skill sets that will enable the State to transform and achieve its strategic goals of improved customer alignment and service delivery, such as business analysis and relationship management, were significantly lacking, although there was evidence that there is “bench strength” within the organization that could be recast into key positions.
- Finally, analysis of the current state across technology, organization, process, strategy and service level also showed a reactive trend as compared to global public and private best-in-class organizations. DTMB leadership is keenly aware of many of the activities that would enable the organization to transform to the desired “managed” state, but are constrained by the current spending pattern and operational focus.

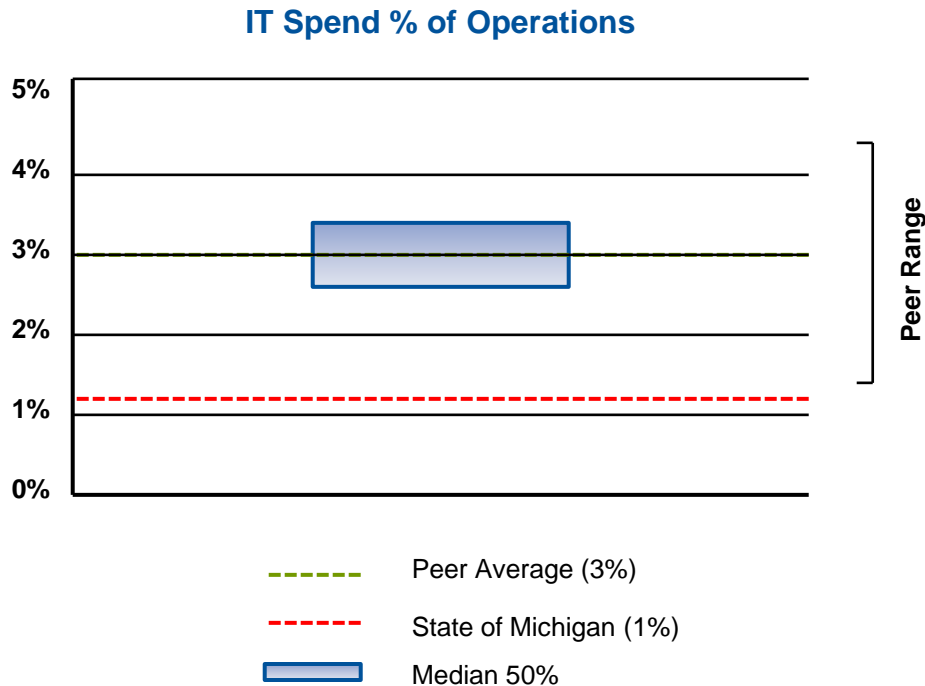
Executive Summary — Summary of Findings

Overview (Cont'd)

- Strategic investment and a highly-actionable improvement road map will propel DTMB to its desired state, thereby achieving its goals for customer satisfaction, efficient service delivery and innovation.
- The subsequent slides provide additional detail in support of the above summary.

Executive Summary — Summary of Findings

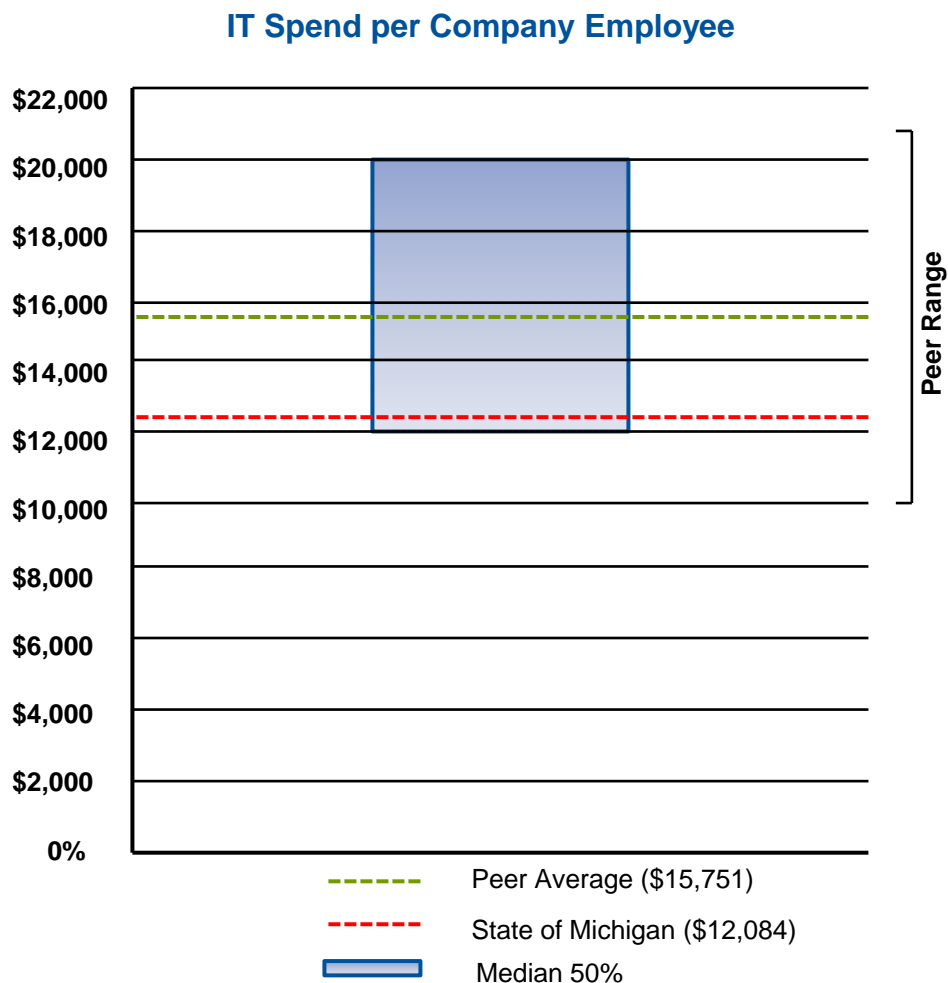
State of Michigan Spends a Lower Percentage of Operational Expenses on IT than Peer Organizations



- From a quantitative perspective, a number of findings showed lower spending on IT and suggested a “reactive” spending pattern that does not include strategic investments in IT.
- First, benchmarking results revealed that funding of IT operations within Michigan is substantially less than peer organizations. The graph on the left illustrates that the State of Michigan spends 1% of operating expenses on IT, while peer organizations spend an average of 3% on IT.
- Further analysis, as illustrated on subsequent slides, revealed that not only is the State underfunding IT in comparison to peers, but also this has caused the majority of the existing spend to be used on operational costs instead of capital investments.

Executive Summary — Summary of Findings

State of Michigan Spends Less Than Peers on an IT Spending per Company Employee Basis



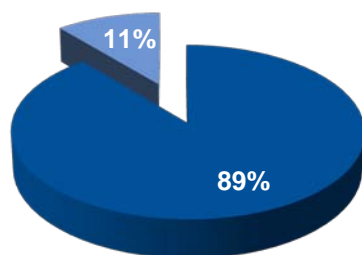
- Another way to view IT spending is on a per-employee basis, which provides insight into the amount of technology support an organization's workforce receives.
- High spending can imply higher levels of automation and/or higher investment in IT in general. Low spending levels can be related to higher overall staffing levels and/or lower IT investment than peers.
- As depicted in the graph to the left, the State of Michigan spends approximately \$12,084 per employee, while the peer organization average is \$15,751 per employee, a second indicator of significantly lower funding of IT as compared to peers.
- To help emphasize the State of Michigan's IT spending in comparison to peers, with its 47,918 employees*, the State of Michigan under-spends peers by approximately \$175M in aggregate, annually.

*Source: Michigan Civil Service Commission HWF2, 2011

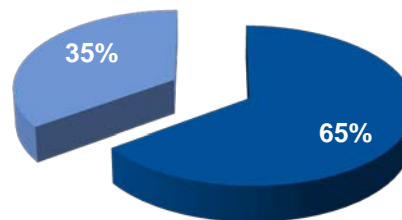
Executive Summary — Summary of Findings

State of Michigan Spends the Majority of IT Funds 'Keeping the Lights On'

- Assessing IT capital expenses vs. operational expenses helps portray the investment profile for an organization in a given year, highlighting the balance between running the business and strategically investing in the future.
- Organizations with a higher capital spending may...
 - Be investing heavily in strategic IT infrastructure
 - Not have been managing asset investments well (i.e., “catching up”)
 - Simply have a more aggressive capitalization policy.
- The State of Michigan’s percentage of spending on capital expenses (11%) is far below peer averages (35%), which suggests a reactive spending approach and a potential for the inverse of the scenarios listed above.
- While operational spend is less than peers, it represents the significant majority of all IT spending in the State of Michigan.



■ SOM IT Operating Expenses
■ SOM IT Capital Expenses

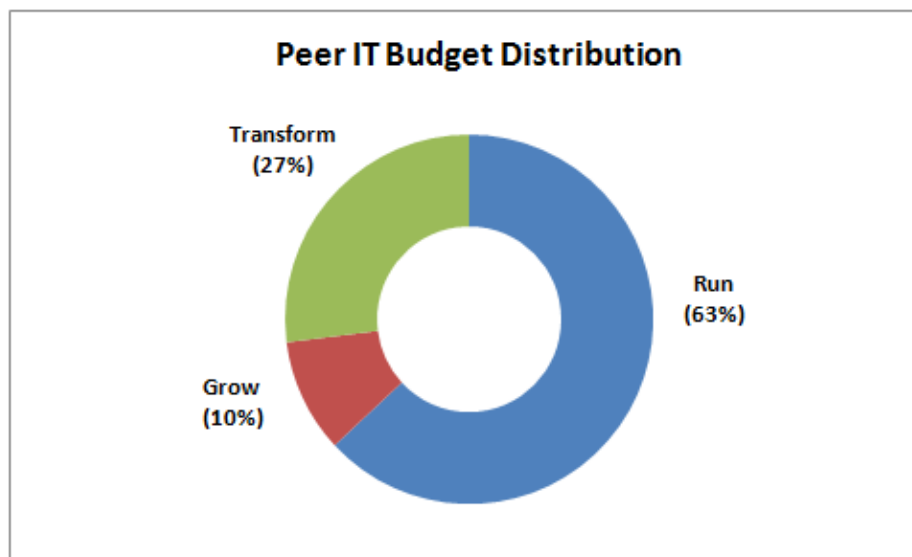


■ Peer IT Operating Expenses
■ Peer IT Capital Expenses

Executive Summary — Summary of Findings

Emphasis on Spending to Run the Business Limits Growth and Transformative Objectives

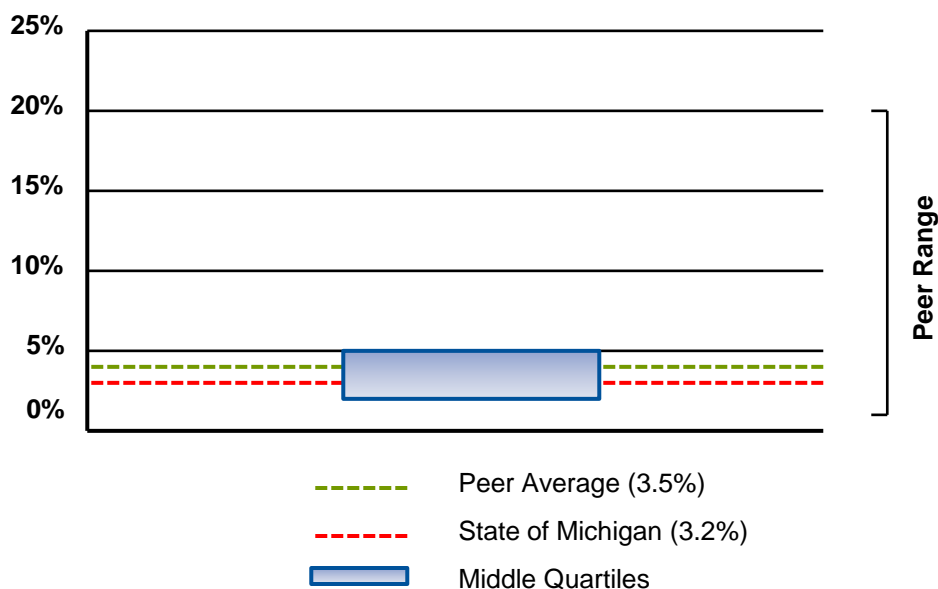
- In light of the State of Michigan's proportion of operational expenses, the data suggest that current spending patterns limit growth and transformative efforts. While peer organizations spend more than one-third of IT funds on growth and transformative investments, the State of Michigan has focused most of its spend on "keeping the lights on."
- Generally, high-"run" spending may indicate a limited strategic role for IT, while high-"grow" and "transform" spending might indicate IT has a stronger strategic role, where the focus should be on ROI. The graph below illustrates peer averages for IT budget distribution from a run/grow/transformation perspective.



Executive Summary — Summary of Findings

The State of Michigan Has Slightly Fewer IT Resources Than Peers

State and Local Governments: % of IT to Total Employees



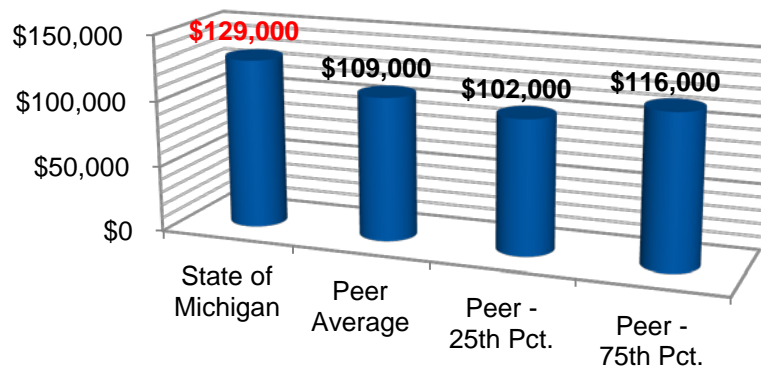
- As expected when assessing the State from a personnel perspective, the total percentage of IT employees to all State of Michigan employees is 3.2%, which is lower than the average for all state and local governments, 3.5%, but relatively close to the norm.
- The lower ratio was anticipated because Michigan is one of the few states and commonwealths that has benefited from increased efficiencies borne through consolidation of operations and shared services.

Executive Summary — Summary of Findings

State of Michigan Average Spend on IT Resources is Higher Than Peers

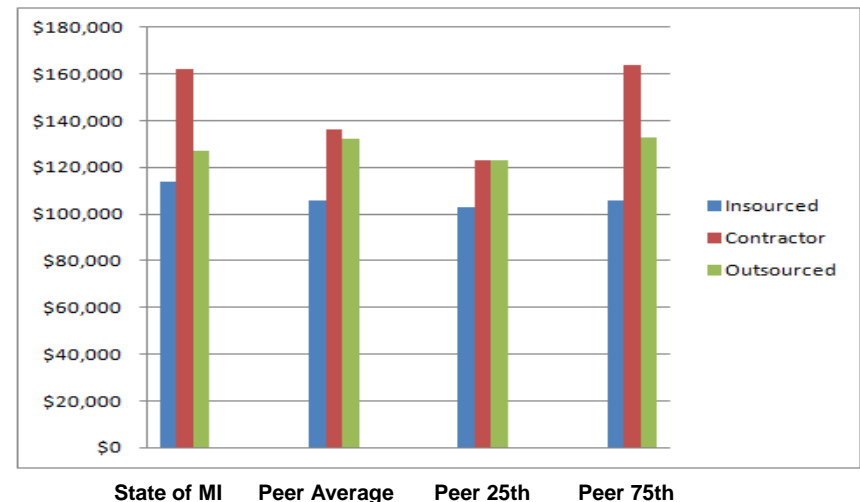
- However, despite spending less than peers on a statewide per-employee basis, and having fewer IT resources as a percentage of its statewide workforce, the State of Michigan's cost per IT FTE for application support is \$129,000, or **18% higher than the peer group average**.
- Quantitative and qualitative analysis suggests that this is primarily driven by high contractor costs, some of which were procured in response to IT workforce retirement during the past few years. In short — another example of being reactive, and not proactive.
- While cost per FTE for contractor and insourced (employee) resources was high, cost per FTE for outsourced resources was low in comparison to peers.

Blended Cost per FTE for Application Support*



*The FTE count includes contractor costs.

Cost per FTE (In-House, Contractor and Outsourced)



Executive Summary — Summary of Findings

Current IT Resources Exhibit High Operational Proficiency and Untapped ‘Bench Strength’

- While the IT head count is lower than peers, the insourced (employee) resources exhibit a high ability to perform.
- The Job Skills Inventory revealed that DTMB has a higher percentage of staff with proficiency at the Advanced and Master level than its public or private peers.
- Moreover, DTMB also has “bench strength” (individuals with skills not used for their current job function) that could be recast into key roles where skills are deficient.

Industry Benchmark Skill Proficiency Comparison

	% of Skills at Each Proficiency Level				
	Limited	Basic	Intermediate	Advanced	Master
DTMB	6%	19%	37%	31%	7%
Public	8%	23%	35%	29%	6%
Private	7%	23%	38%	28%	5%

Highly Qualified and Qualified FTEs currently in Different Job Families

Job Family	High Qualified	Qualified	Total
Application Development	43	122	165
Architecture	21	71	92
Business Analysis	37	123	160
Business Continuance	11	50	61
Business Intelligence	29	81	110
Client Technology / Desktop Support	67	144	211
Computer Operations	34	125	159
Customer Support / Help Desk	42	132	174
Database Administration	22	64	86
Database Analysis	44	65	109
IT Leadership	17	66	83
IT Security	20	79	99
Network Management	13	62	75
Project Management	25	87	112
Quality Assurance	49	93	142
Relationship Management	15	48	63
Release Management	23	79	102
Systems Administration	48	107	155
Telecommunications	22	71	93
Web Administration	25	51	76
Web Design	30	84	114



The State of Michigan won five (5) awards, more than any other state, at this year's annual conference of the National Association of Chief Information Officers (NASCIO).

2011 Awards

- Data, Information and Knowledge Management — [Department of Human Services Decision Support System](#)
- Digital Government: Government to Business — [USAHerds Cattle Tracking Protecting our Food Supply](#)
- Enterprise IT Management Initiatives — [Optimizing Government Technology Value: Establishing Enterprise Metrics to Ensure Operational Readiness and Business Availability](#)
- Fast Track Solutions — [MiCloud Automated Hosting Service](#)
- Information Communication Technology (ICT) Innovations — [Michigan Building Intelligence System](#)

Executive Summary — Summary of Findings

Additional Key Skill Sets are Required to Transform to Desired State

- Although the State exhibits high operational proficiency, some of the key skills required to transform the State, such as IT leadership, business analysis and relationship management, are lacking.

Job Family	Highly Qualified	Qualified	Less-Qualified	Total HC	Strength (% HQ+Q)	Rank
Client Technology/Desktop Support	31	38	32	101	68%	High
Web Administration	4	3	5	12	58%	
Quality Assurance	7	4	10	21	52%	
Systems Administration	25	14	43	82	48%	
Application Development	48	78	163	289	44%	
Network Management	6	7	19	32	41%	
Database Analysis	2	3	8	13	38%	Med
Database Administration	14	7	35	56	38%	
Web Design	5	8	22	35	37%	
Telecommunications	7	8	32	47	32%	
IT Security	2	5	15	22	32%	
→ Business Analysis	3	13	37	53	30%	Low
Architecture	3	6	22	31	29%	
Business Intelligence	1	3	10	14	29%	
→ Project Management	12	16	80	108	26%	
Customer Support/Help Desk	4	19	66	89	26%	
Computer Operations	1	12	46	59	22%	
→ IT Leadership	10	17	96	123	22%	
Business Continuance	1	0	4	5	20%	
Release Management	1	1	8	10	20%	
→ Relationship Management	2	1	38	41	7%	

Executive Summary — Summary of Findings

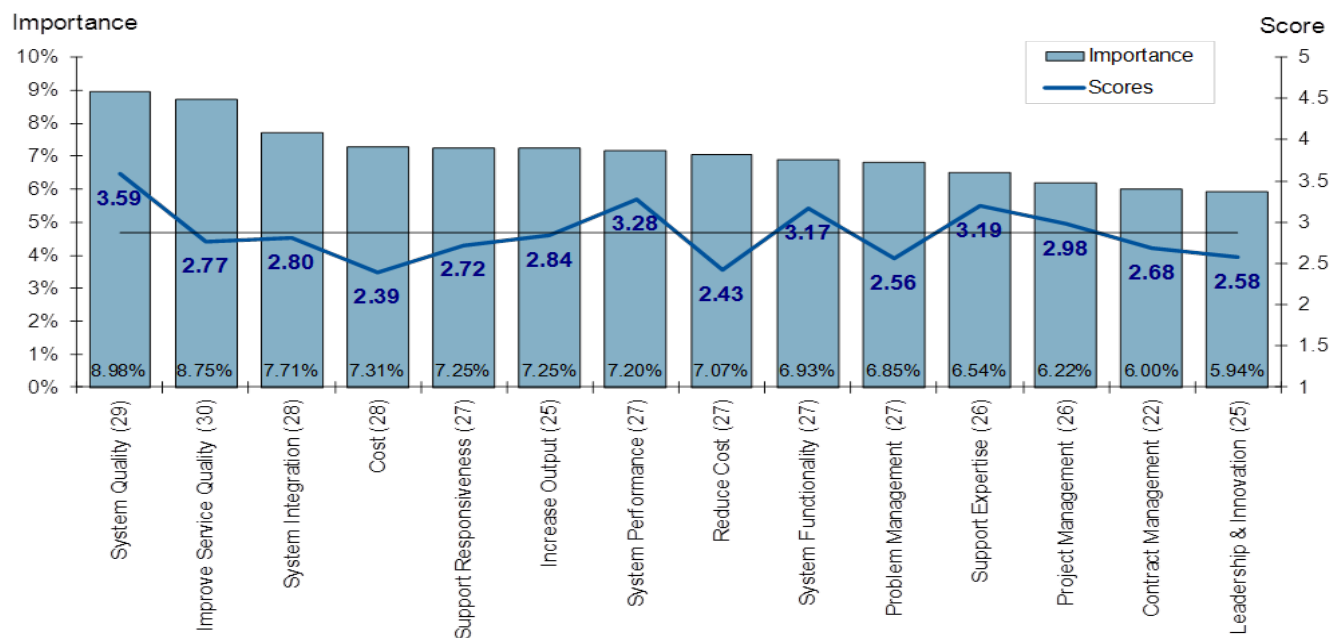
Needs Analysis Revealed That Current Skills Gaps Negatively Impact Customer Perception of DTMB

- **Low Perceived Customer Value of IT Services** — The complexity of customer invoices, the lack of an IT performance metrics dashboard, and the perceived lack of accountability for service have led to feelings of high costs and low value for DTMB services.
 - Bottom Line: DTMB must communicate the business value of its services.
 - **Misalignment with Strategic Priorities** — Agency responses varied significantly when asked if DTMB was involved with their strategic planning activities. In some instances, the IO is “at the table” for strategic discussions, while in other instances the IO role and function performed for the agency are not understood.
 - Bottom Line: Although the concept of a dedicated project liaison is a good initial step to developing partnerships with the agencies, the majority of IOs are currently performing in operational roles and are not viewed as strategic partners.
 - **Service Delivery Issues** — Going into the agency interviews, Gartner expected the discussions to focus on how DTMB could partner with the agencies to further enable the fulfillment of their missions and to achieve greater business efficiencies, but the focus of the discussions primarily focused on service delivery issues, which emphasized the agencies’ desire for improved service.
 - Bottom Line: Although several agencies acknowledged the efforts of the current CIO to improve service delivery, DTMB must continue to address the agency perception that it is not customer-service-oriented and must identify the root causes of customer dissatisfaction.
 - **Lack of Project Orientation** — Some agencies do not know the status of their current projects and view these investments as never-ending.
 - Bottom Line: DTMB must improve its project communications. This includes working with agencies during project definition, project prioritization, project change management and ongoing project status reporting.
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Executive Summary — Summary of Findings

The IT Business Effectiveness Benchmark Supports the Impact of the Skills Gaps on Customer Perception

- As a result, the aforementioned skills gaps have impacted customer perceptions of effectiveness, as illustrated below. Functions such as leadership and innovation were rated among the lowest in terms of customer satisfaction, which corresponds with the identified skills deficiencies.



- The blue columns show the relative importance of the services and systems criteria for all responding agencies.
- The blue line indicates the satisfaction scores for each of the services and systems criteria.
- The straight black line is the average satisfaction score for DTMB — 2.87.

Executive Summary — Summary of Findings

Despite this Perception, DTMB Has the Opportunity to Address a Number of Shared Agency IT Needs

- Some of the key shared needs identified by Gartner include:
 - Technology partners who understand their business and can proactively provide high-value technology solutions
 - A service catalog that is defined by benefits delivered to the business, instead of IT components
 - Invoices that can be easily understood regarding the services provided and the associated costs
 - Citizen- and business-facing applications to provide customers greater access to services, as well as internal applications to allow for mobile workforce enablement
 - More project managers and project tracking, and projects to be completely delivered on schedule and within defined budgets
 - Performance dashboards for each agency
 - Expedited mobile provisioning to provide mobile and tablet devices for mobile workforce enablement
 - Quickly evolving technical architecture standards to keep pace with agency business needs
 - Clarity on status to complete a procurement, and appropriate controls to enforce contract terms with vendors
 - Security standards that protect enterprise security interests, but are flexible enough for agencies to realize their business objectives.

Executive Summary — Summary of Findings

DTMB Also Has the Opportunity to Address Agency-Specific Needs

- Gartner also identified needs that were related to one or several agencies, which represent major opportunities for DTMB to improve or expand its service delivery to further help its customers. Primary need areas include:
 - **Social Media Strategy** — Three agencies communicated a need for developing a social media strategy and/or approach for agencies to follow.
 - **Content Management** — Three agencies expressed a desire to redesign the content management and website design for their agency sites in an effort to make them look more professional.
 - **Major System Upgrades** — The Department of Community Health has a \$100M Medicaid upgrade in the works. The Department of Agriculture is looking to replace the legacy system around its licensing solution and is working with LARA and other agencies that have licensing responsibilities.
 - **Consolidation** — Michigan State Police is focused on its Regional Policing Plan initiative, which will reduce brick-and-mortar locations by 35. Given current economic conditions, other agencies may follow.
 - **Self-Service Applications** — The Department of Human Services is instituting a self-service phase to its BRIDGES initiative in an effort to reduce caseloads for social workers.
 - **Mobile Applications** — Michigan.gov has begun an initiative to migrate the most popular content to mobile applications, and is an example of demand expressed by agencies.
 - **Health Insurance Exchange** — LARA, in an effort with the Department of Community Health, has the “MiHealth Marketplace” on the horizon. This portal will be used for purchasing health insurance and monitoring benefits.
 - **Predictive Analytics** — The Department of Human Services stated a need for a predictive analytics capability to perform “what if?” analyses against historical information. This type of functionality could help all agencies.
 - **Integration** — Three agencies expressed a need for better data integration capabilities with the federal government for environmental data, healthcare-related data, etc.

Executive Summary — Summary of Findings

DTMB Also Has the Opportunity to Address Local Government Needs

- Finally, Gartner also identified needs expressed by local government representatives, which could help DTMB extend its footprint to additional outside partnerships. Primary need areas include:
 - **Mobile Applications** — All localities expressed interest in mobile application development and mobile device management from DTMB, in particular with State agencies that have counterparts in their localities.
 - **Volume Pricing** — All localities are interested in leveraging software and hardware purchasing where possible, but localities are not confident that DTMB can get them better pricing.
 - **GIS Solutions** — Several localities are pleased with existing GIS services being provided, and would like to expand the GIS program where practical.
 - **Cloud Computing** — Larger localities generally do not feel the need for outsourcing to DTMB their existing applications or infrastructure, but they are interested in sharing more-advanced technologies such as cloud computing.
 - **Requirements Definition Process** — Smaller localities reported a need to be included in the requirements development process for applications the State wants to provide.
 - **Outsourcing Opportunities** — Smaller localities are interested in outsourcing any portion (and in fact all) of their infrastructure (including data centers) that DTMB can demonstrate would be cheaper for them than what they are spending now.

Executive Summary — Summary of Findings

Analysis Also Yielded a Number of Major Opportunities for DTMB

- During the assessment, Gartner identified 48 high-level opportunities for DTMB across the nine IT roles identified on the previous slide.
- To help inform the plan of action, each opportunity was evaluated across two dimensions:
 - **Speed of Benefits Realization** — Relative time required to realize the inherent benefits of the opportunity.
 - **Impact** — Relative impact that the opportunity would have on DTMB in terms of delivering high customer value to agencies and other partners, and/or impact that an opportunity would have on DTMB being able to fulfill its strategic objective of being a best-in-class IT service provider.
- Using the above dimensions, the opportunities were evaluated and assigned to one of four planning quadrants, which aided in prioritizing DTMB efforts going forward and developing the road map:
 - **Top Priorities** — Opportunities that have a shorter estimated time frame for implementation, while also delivering a high improvement impact. These are the opportunities that DTMB should emphasize and act upon immediately.
 - **Quick Wins** — Opportunities that have a shorter estimated time frame for implementation but have a moderate impact as compared to the Top Priorities. Quick Wins should also be pursued as soon as possible, but should not interfere with achievement of the Top Priorities.
 - **Key Investments** — Opportunities that have a significant improvement impact, but require a longer implementation time frame as compared to Top Priorities. DTMB should look to begin planning and investing in these opportunities now so that they can be realized subsequent to the Top Priorities.
 - **Future Improvements** — Opportunities that are longer-term in terms of implementation time, while also not offering the highest relative improvement impact. In terms of prioritization, DTMB should focus on these opportunities after implementing other identified opportunities.

Executive Summary — Plan of Action

Projects Align Closely With Identified Opportunities

Speed of Benefits Realization	Impact	
	Lower	Higher
	Slower	Faster
	Future Improvements	Quick Wins
	<ul style="list-style-type: none"> Operationalize the Strategic Plan Become More Business Architecture-Driven Implement Predictive Analytics Build Enterprise Information Management (EIM) Capability Enhance Governance of Business Intelligence (BI)/Performance Management (PM) Activities Standardize Data Management Processes Continue to Innovate Enterprise Architecture Address Vendor Risk Increase Scope of Vulnerability Management Incorporate Privacy Management Implement Automated ICT Operational Tools Improve ICT Process Maturity 	<ul style="list-style-type: none"> Position the IO as a Strategic Partner Engage Local Governments Clarify Services to Customer Agencies Leverage the Tools DTMB Already Owns Institutionalize Enterprisewide Reporting Tool Realign EA to Report to an Executive-Level Function Establish the Solution Architect Function Reinforce SUITE Methodology Standardize Project Status Reporting Standardize Project Management Processes Conduct a Comprehensive Risk Assessment Improve Communications from EA to Stakeholders Conduct Security Training
	<ul style="list-style-type: none"> Improve Customer Service Satisfaction Establish Internal Governance Strengthen Application Portfolio Management Optimize Resources to Enable Resource Pooling Across DTMB Align Organizational Reporting and Governance Structure Enhance Financial Management Increase Skill and Training for Project Management Roles Enable Citizen-Centric Government Align EA with Industry Best Practices Increase Scope of EA Coverage More Closely Align Purchasing and Procurement Functions Improve Security Operations Center (SOC) Operations Enhance Data Security 	<ul style="list-style-type: none"> Address Agency Perception of DTMB's Business Value Establish Business Analyst Function Establish Agency ICT Strategic Planning Processes That Are Separate From the Call for Projects Consolidate ICT Service Catalogs Measure Customer Satisfaction Improve Customer Metrics Establish and Communicate Standard Procurement Process Enable Procurement Automation

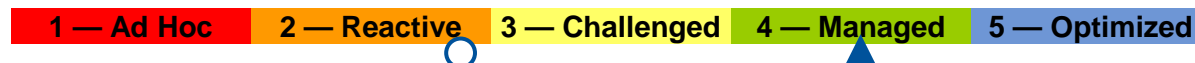
Executive Summary — Summary of Findings

State of Michigan Has Opportunities to Mature Its Strategic and Operational Execution

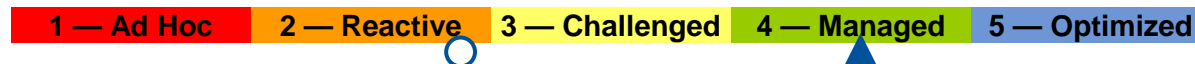
Current State = ○
Target State = ▲

- Finally, from a strategic and operational execution standpoint, the State of Michigan has performed well in reacting to customer needs with the resources it has, but has significant opportunity to transform its composition, processes and execution to improve its efficiency and effectiveness.
- Overall, DTMB was rated as “Reactive” from a TOPSS (technology, organization, process, strategy, service levels) perspective, which is supported by other quantitative findings such as the high ratio of operational vs. capital spending. It should be noted that, at the State’s request, **maturity levels are in comparison to best-in-class organizations for each area, not simply other State government entities**, and that the State would compare well to the most effective State governmental jurisdictions.

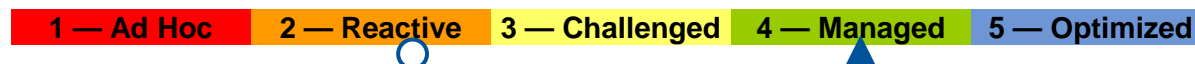
Technology:



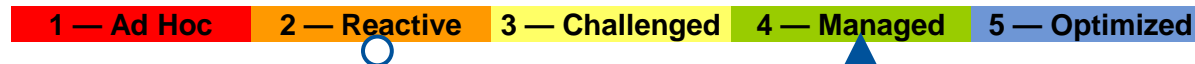
Organization:



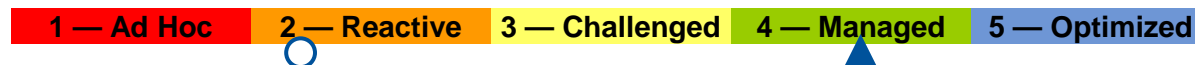
Process:



Strategy:



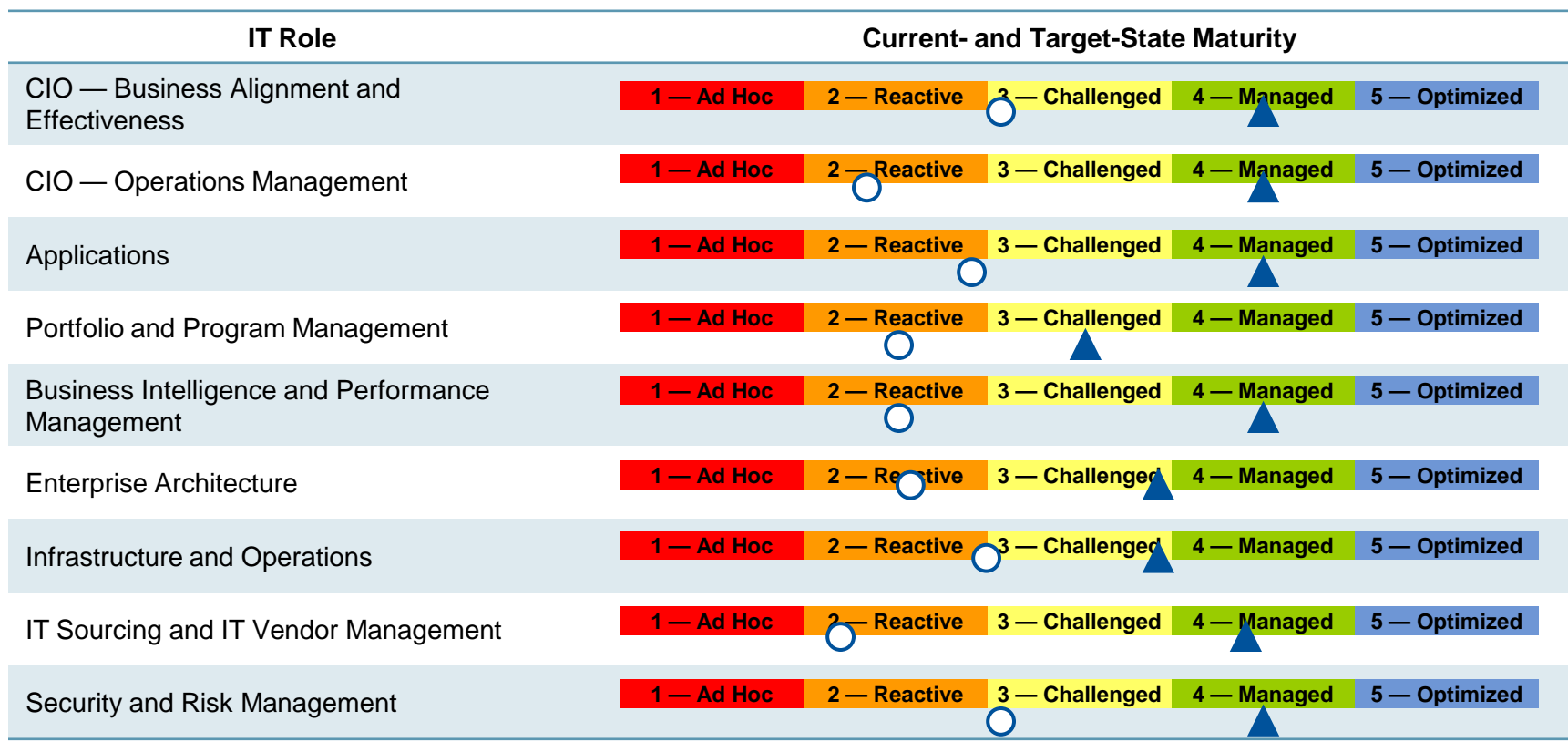
Service Levels:



Executive Summary — Summary of Findings

Several IT Roles Exhibit Higher Maturity

- From an IT Role perspective, the State of Michigan has varying levels of maturity, but this view shows a predominately reactive theme as well. It should be noted that, while the aggregate maturity target for DTMB is “Managed,” within each role there are role-specific incremental improvement goals that were identified based on capabilities, constraints and other factors.



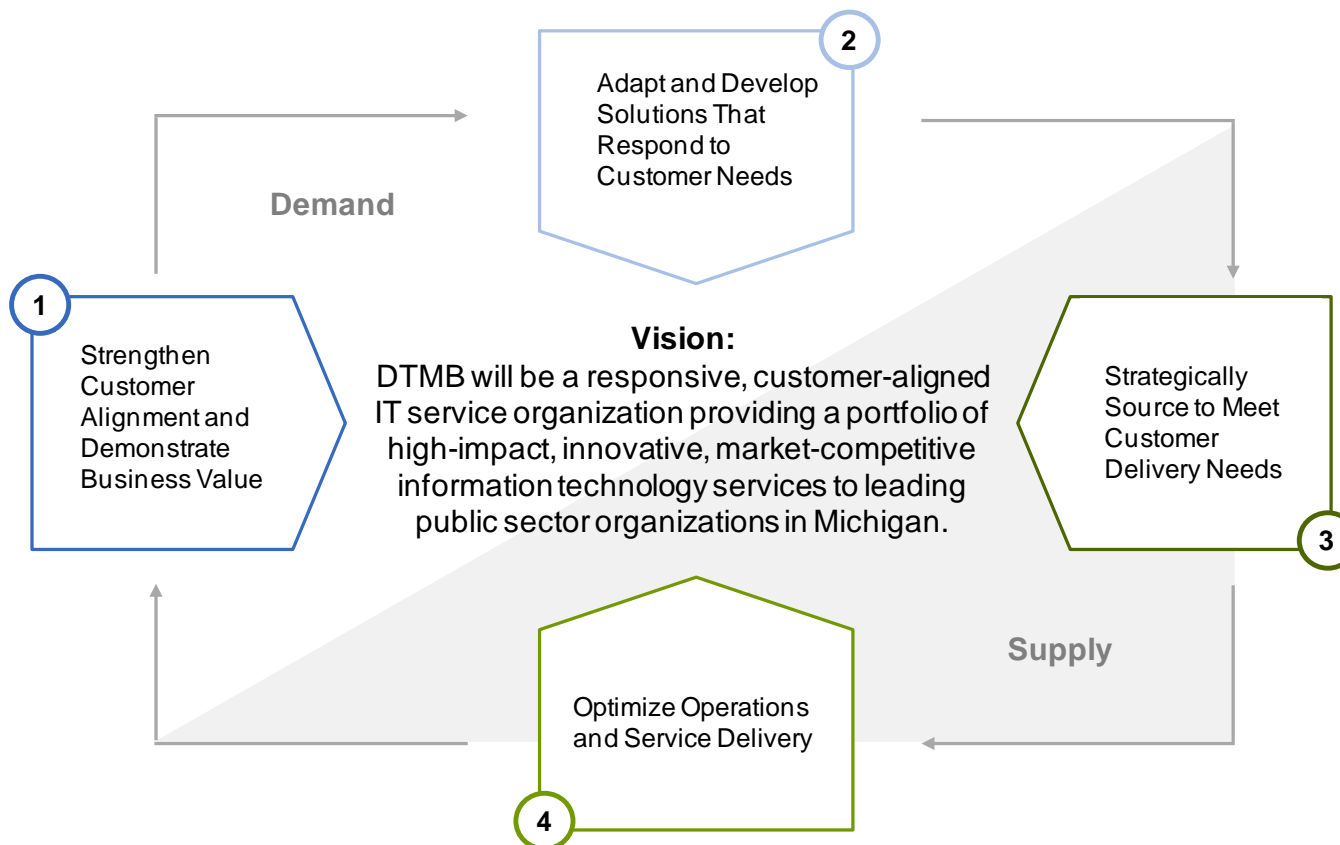
Executive Summary

Plan of Action

Executive Summary — Plan of Action

Four Fundamental Strategic Goals to Achieve the DTMB Future Vision for ICT

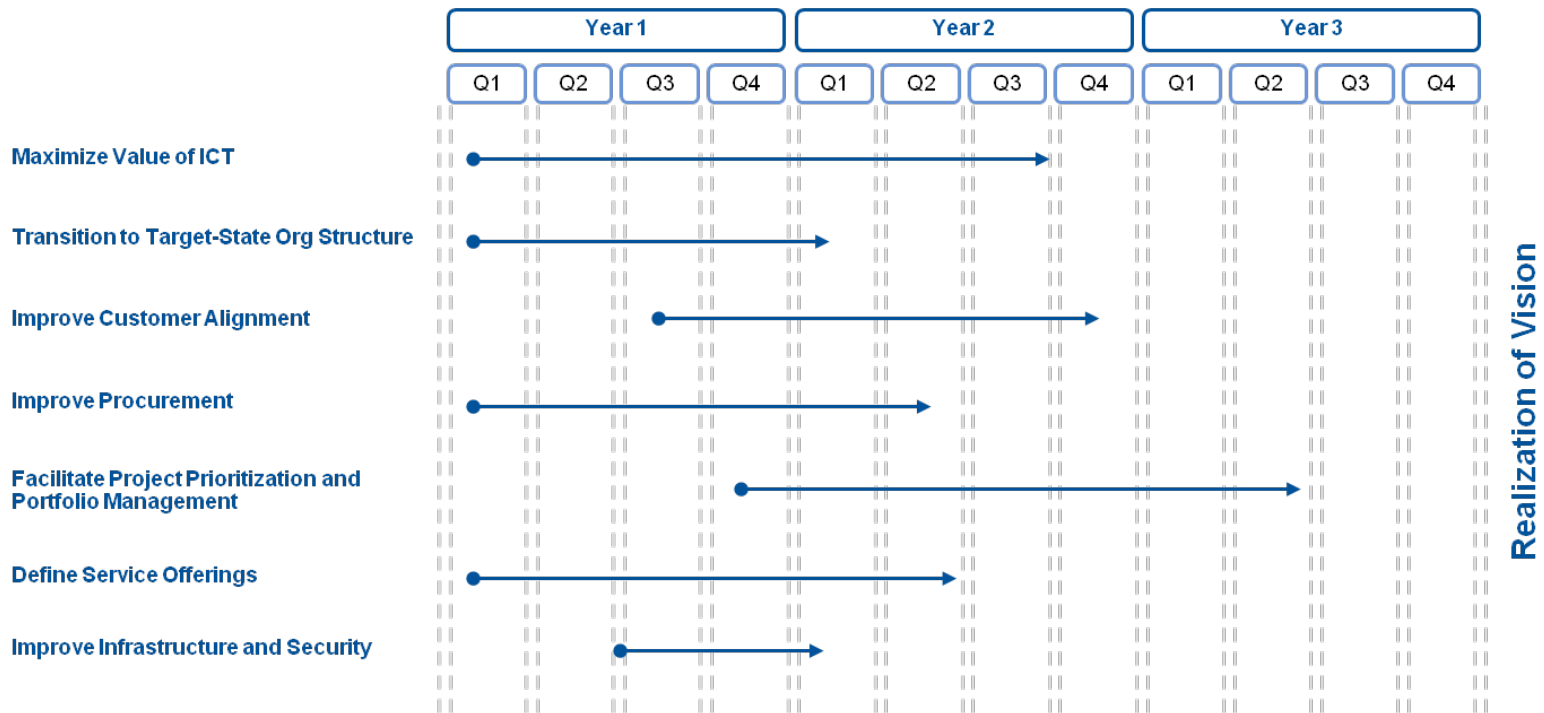
- To address the findings summarized in the previous section, DTMB and Gartner developed four strategic goals and a strategic vision for transformation as summarized below. Realization of each goal will be achieved through a series of critical projects, further grouped into programs.



Executive Summary — Plan of Action


Road Map and Program Overview

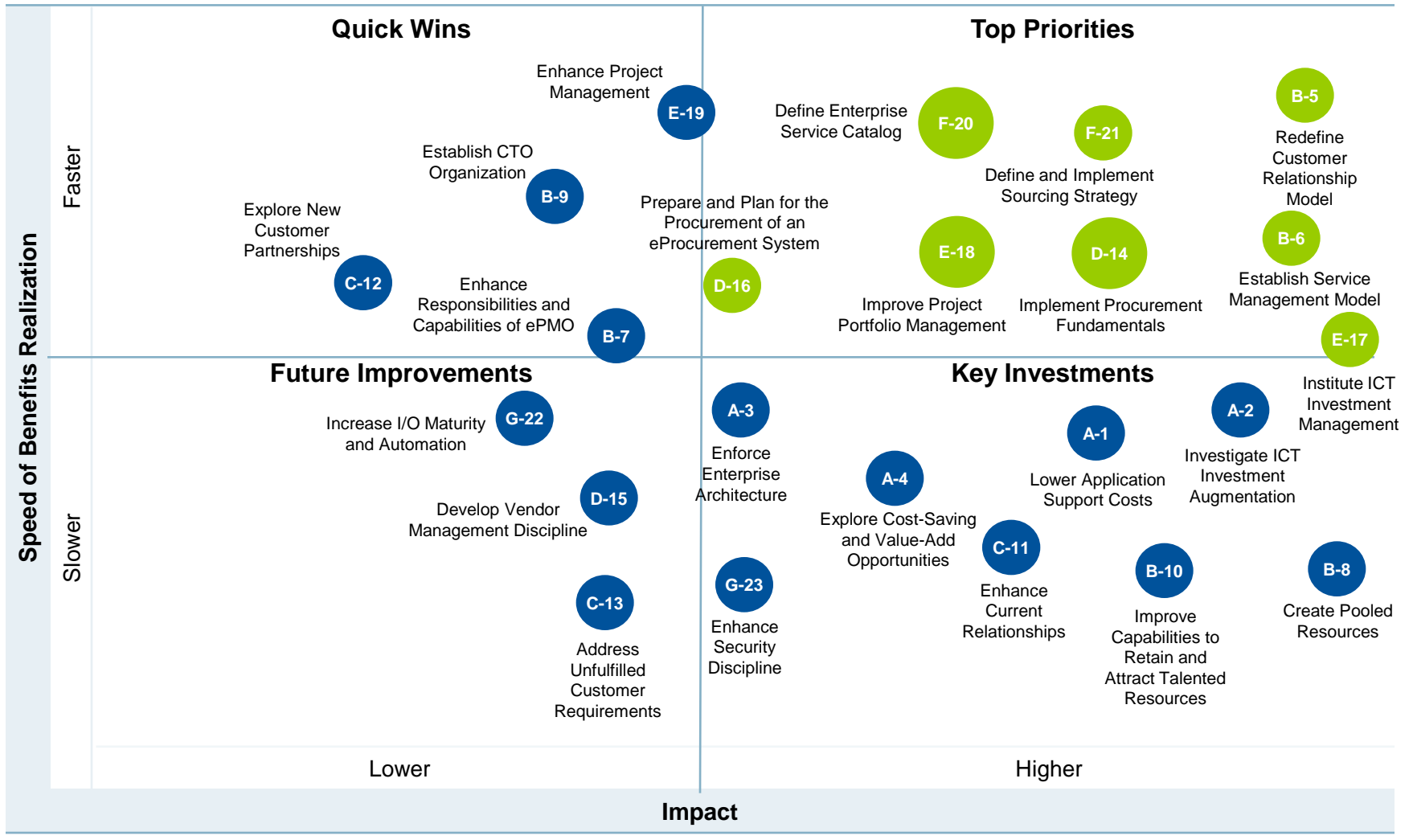
- Projects were grouped into programs to provide the State with related, actionable sets of activities. The road map for executing the seven identified programs is presented below, showing the major activities that will be performed during the next two to three years.
- Other subsequent tasks and activities will be executed after these programs are complete, but these seven foundational programs will significantly advance DTMB toward achieving its vision.



Executive Summary — Plan of Action

Summary of All DTMB Recommended Projects

 Immediate-focus projects
(Size relative to cost)



Executive Summary — Plan of Action

Projects Align Closely With Identified Opportunities

Speed of Benefits Realization	Quick Wins		Top Priorities			
	Faster	<ul style="list-style-type: none">■ Position the IO as a Strategic Partner (B-5)■ Engage Local Governments (C-12)■ Clarify Services to Customer Agencies (F-18)■ Leverage the Tools DTMB Already Owns (D-14)■ Institutionalize Enterprisewide Reporting Tool (C-13)■ Realign EA to Report to an Executive-Level Function (B-9)■ Establish the Solution Architect Function (B-9)■ Reinforce SUITE Methodology (B-7; E-19)■ Standardize Project Status Reporting (E-19)■ Standardize Project Management Processes (E-19)■ Conduct a Comprehensive Risk Assessment (G-23)■ Improve Communications from EA to Stakeholders (A-3)■ Conduct Security Training (G-23)	Higher	<ul style="list-style-type: none">■ Address Agency Perception of DTMB's Business Value (F-20)■ Establish Business Analyst Function (B-5)■ Establish Agency ICT Strategic Planning Processes That Are Separate From the Call for Projects (E-17; E-18)■ Consolidate ICT Service Catalogs (B-6; F-20; F-21)■ Measure Customer Satisfaction (B-5)■ Improve Customer Metrics (B-5)■ Establish and Communicate Standard Procurement Process (D-14)■ Enable Procurement Automation (D-16)		
		Future Improvements		Key Investments		
		Slower		<ul style="list-style-type: none">■ Operationalize the Strategic Plan (B-5)■ Become More Business Architecture-Driven (B-9)■ Implement Predictive Analytics (C-13)■ Build Enterprise Information Management (EIM) Capability (C-13)■ Enhance Governance of Business Intelligence (BI)/Performance Management (PM) Activities (C-13)■ Standardize Data Management Processes (C-13)■ Continue to Innovate Enterprise Architecture (B-9)■ Address Vendor Risk (D-15)■ Increase Scope of Vulnerability Management (G-23)■ Incorporate Privacy Management (G-23)■ Implement Automated ICT Operational Tools (G-22)■ Improve ICT Process Maturity (G-22)	Lower	<ul style="list-style-type: none">■ Improve Customer Service Satisfaction (C-11)■ Establish Internal Governance (E-17; E-18)■ Strengthen Application Portfolio Management (A-1)■ Optimize Resources to Enable Resource Pooling Across DTMB (B-8)■ Align Organizational Reporting and Governance Structure (B-5 thru B-9)■ Enhance Financial Management (A-2; E-17)■ Increase Skill and Training for Project Management Roles (B-7; B-10; E-19)■ Enable Citizen-Centric Government (A-4)■ Align EA with Industry Best Practices (A-3)■ Increase Scope of EA Coverage (A-3)■ More Closely Align Purchasing and Procurement Functions (D-14)■ Improve Security Operations Center (SOC) Operations (G-23)■ Enhance Data Security (G-23)
		Impact				

Executive Summary — Plan of Action

Major Opportunity Area: State Application Rationalization

- A major area of cost-savings and benefits-realization opportunity relates to the State's aging application portfolio. By performing business cases and through strategic sourcing, the State can save millions in software, hardware and support costs. In an effort to jump-start the application rationalization process, Gartner identified initial candidates for the State to investigate that can be further evaluated from a business value, technical quality and cost perspective.
- The Sales, Use and Withholding (SUW) application is a 30-year-old application that brings in \$13.7B in revenue for the State. SUW is the ideal candidate to replace because it will reduce support costs, improve customer service, improve audit functionality and allow the implementation of a streamlined sales tax.

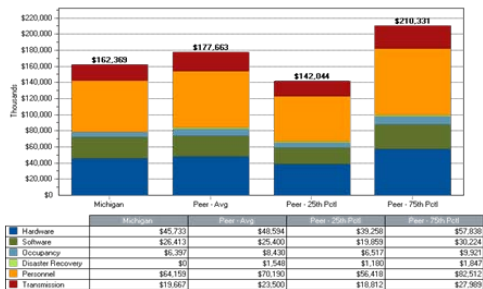
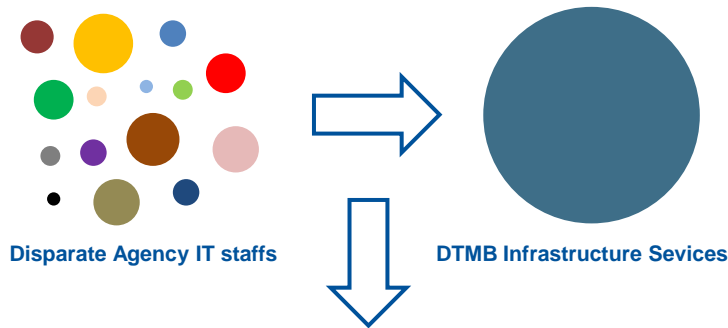
Agency	Application Name	Total Cost	Type	Application Age	Cost per FP
DHS	MICES	\$5,870,241	In-house	9.00	\$848
DTMB	MAIN (Mainframe)	\$5,424,734	Outsource	17.00	\$186
DTMB	Vision ORS (Clarety)	\$2,220,569	In-house	10.00	\$251
DTMB	DCDS (Data Collection and Distribution System)	\$1,550,765	In-house	16.00	\$786
Mich.gov	Michigan.gov	\$1,198,209	In-house	12.00	\$365
DTMB	MAIN (Web components: C&PE and ETP)	\$1,096,994	Outsource	12.00	\$214
DCH	Cost Settlement	\$1,039,772	Outsource	22.00	\$42
MDOS	BOS (Driver/Vehicle MF backend)	\$1,024,565	In-house	31.00	\$179
MDOC	OMNI	\$784,538	In-house	17.00	\$68
MDOC	COMPAS	\$712,365	Vendor Package	6.00	\$468
TREA	STAR (State Treasury Account Receivable)	\$681,602	In-house	22.00	\$44
LARA Det UIA CR	UIA TAX Processing Application	\$602,284	In-house	22.00	\$58
WDASOM	One Stop Management Information System (OSMIS)	\$516,674	In-house	13.00	\$147
LARA Lan	Workers Compensation System (WORCS)	\$508,015	In-house	22.00	\$62
MSP	Criminal History Record (CHR)	\$493,330	In-house	7.00	\$192
MSP	MI Criminal Justice Information Network (MICJIN)	\$493,315	Vendor Package	10.00	\$576
DHS	CDC/Billing	\$462,695	In-house	11.00	\$497
WDASOM	Michigan Talent Bank (MTB)	\$457,980	In-house	14.00	\$222
DHS	CDC/IVR	\$428,006	Outsource	11.00	\$1,024
MDOS	Qualified Voter File (QVF)	\$412,108	Outsource	15.00	\$117
WDASOM	Michigan Adult Education Reporting System (MAERS)	\$229,915	In-house	12.00	\$260
LARA Lan	OBSASE	\$153,841	In-house	22.00	\$20
MDOC	Corrections Management Information System (CMIS)	\$75,738	In-house	22.00	\$12
MDOS	Branch Revenue (BR)	\$64,191	In-house	31.00	\$57

*It should be noted that the applications benchmarked by Gartner represent a subset of all State applications.

Executive Summary — Plan of Action

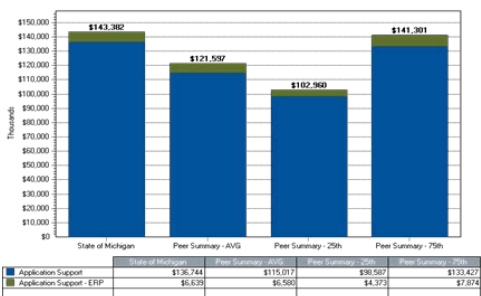
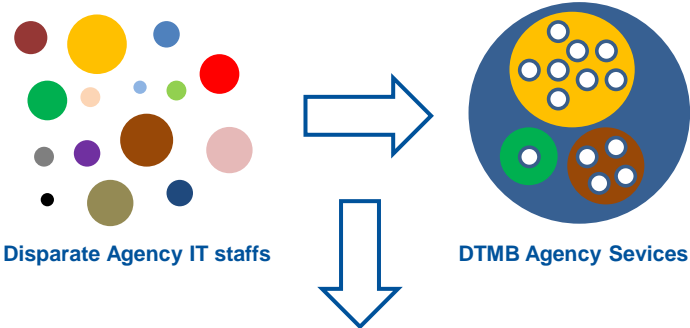
Major Opportunity Area: Consolidation of Agency Services

DTMB has centralized all IT infrastructure support operations under Infrastructure Services.



DTMB has reaped the benefits of I&O consolidation, because the benchmark shows that DTMB's I&O support spending is better than its peer average.

DTMB has aggregated application development and support under Agency Services and has grouped agencies under Information Officers (IOs).



DTMB has an opportunity to achieve similar efficiencies in application support, because the benchmark shows that DTMB spends more on application support than the 75th percentile.

Executive Summary — Plan of Action

Plan of Action Costs and Benefits

- Collectively, the seven programs will drive DTMB toward realization of its vision, address maturity gaps, and help DTMB reach its target state. The required investments to execute the road map will yield significant benefits that will truly transform the State of Michigan.
- To execute the seven programs, the State will need to invest between **\$11M—\$16M** in internal and external resource costs. This figure does not include any hardware or software costs, or downstream projects.
- The near-term programs will require additional investments that will be estimated as part of the road map execution. This includes projects and initiatives such as:
 - Legacy Application Replacement
 - Citizen Portal Implementation
 - Data Center Sourcing
 - Call Center Optimization
 - Network/Broadband Enhancements
 - Resource Pooling
 - Mobility, and BI Solution Implementations
 - eProcurement Software and Implementation
 - I&O Automation and Security Improvement Tools.

Chief Benefits Achieved Through Road Map Execution

- Defined Application Review Process and list of near-term replacement candidates ROI
- Sustained funding for IT transformation; increased value to customers
- Lower Total Cost of Ownership; ROI model to track benefits
- Improved alignment with customers and customer satisfaction
- New services that address business needs by customers
- Foundational architecture for statewide initiatives
- Improved resource allocation and staff capabilities
- Ability to coordinate all State IT projects and focus on business benefits
- Proactive development of innovative solutions to meet business needs
- Improved solution consistency across the enterprise and service delivery
- Standardized and automated processes and increased efficiency
- Economies of scale and improved enforcement for IT procurements
- Improved contracts, terms and conditions
- Vendor oversight to reduce contract risk and maximize value
- Aggregated, centralized view of contracts and renegotiation targets
- 24/7 capability of monitoring and responding to security threats

Executive Summary

Measuring Success

Executive Summary — Measuring Success

Tracking Costs and Benefits

- Defining and tracking the costs and benefits of implementing the road map will be critical to convey progress and to “course-correct” as needed. For each project and investment decision, DTMB can formulate a business case that contains both **quantitative benefits**, such as...

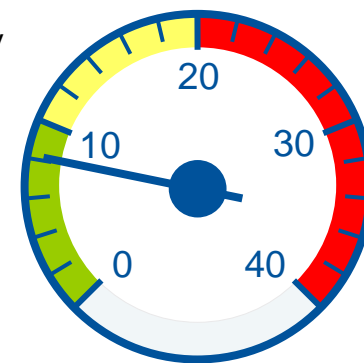
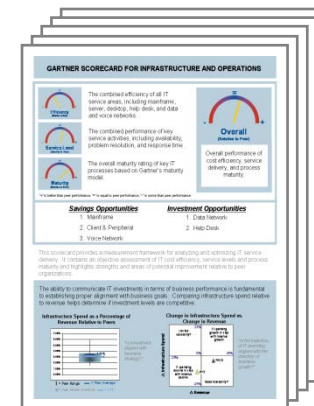
- **Business Effectiveness** — Business-oriented customer metrics (e.g., inspections conducted, licenses issued, etc.)
- **Efficiency** — Increased efficiency of IT service delivery
- **Cost Containment** — Reduced TCO, shared services benefits, etc.

...as well as **qualitative benefits**, such as...

- **Customer Satisfaction** — Higher customer alignment and satisfaction with DTMB services
- **Access and Transparency** — Greater self-service options for customers/citizens
- **Agility and Flexibility** — Flexible technical and application infrastructure to react quickly to statutory changes and business/economic impacts.

- Examples of metrics and outcomes that would be beneficial to track include:

- Number of legacy systems retired/modernized
- Increased customer satisfaction levels
- Lower application support costs
- Increase in skills proficiency for key areas (e.g., relationship management, business analysis)
- Number of renegotiated IT contracts
- Delivery of mobility or citizen portal solution(s).

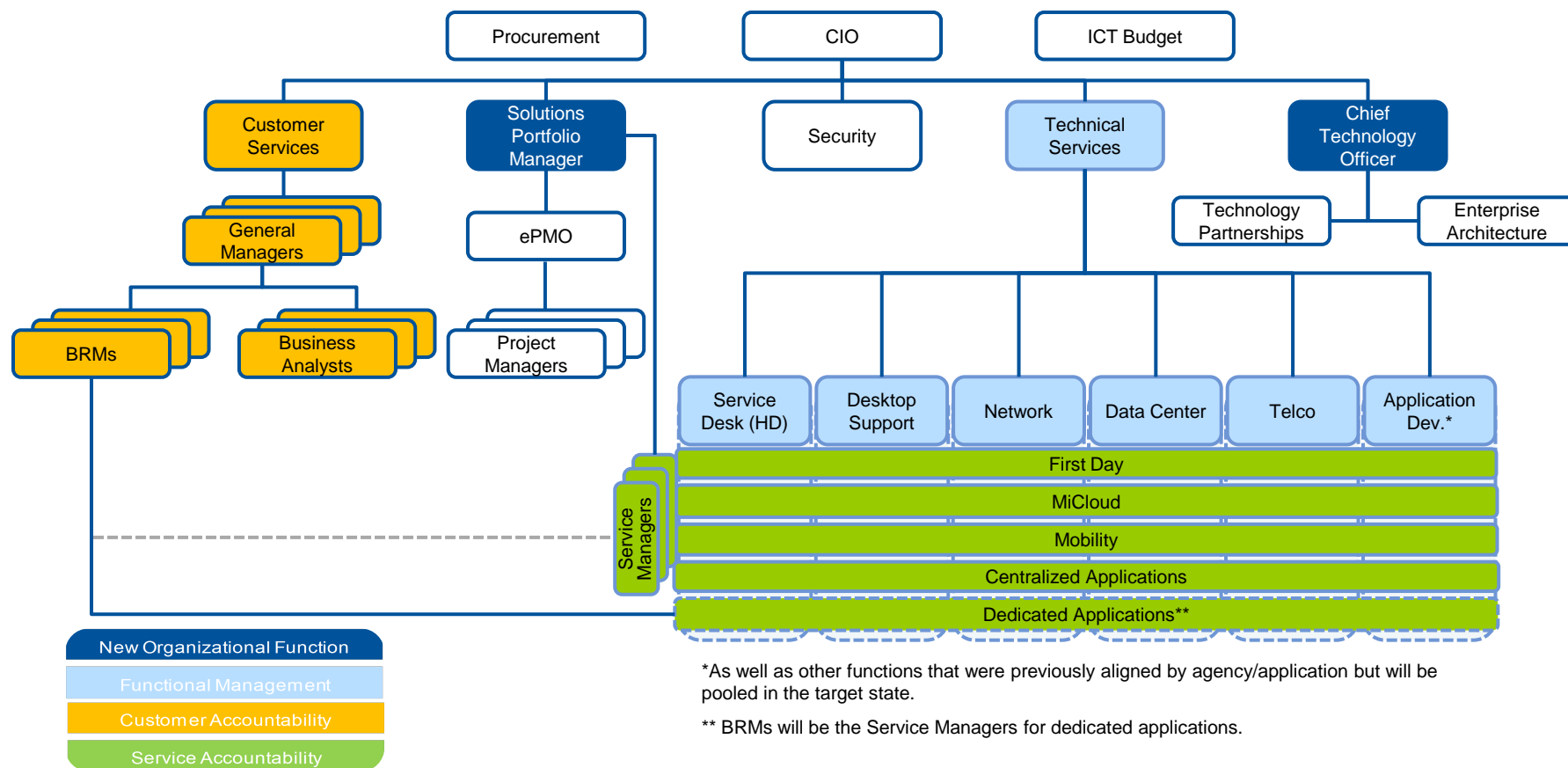


Number of Legacy Applications Retired, 2013

Executive Summary — Measuring Success

Functional Changes Will Provide Foundation for Change

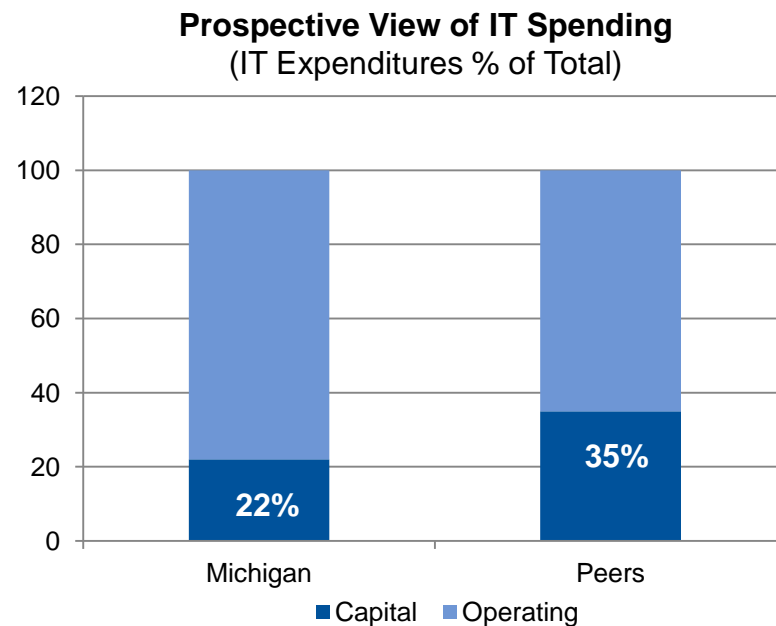
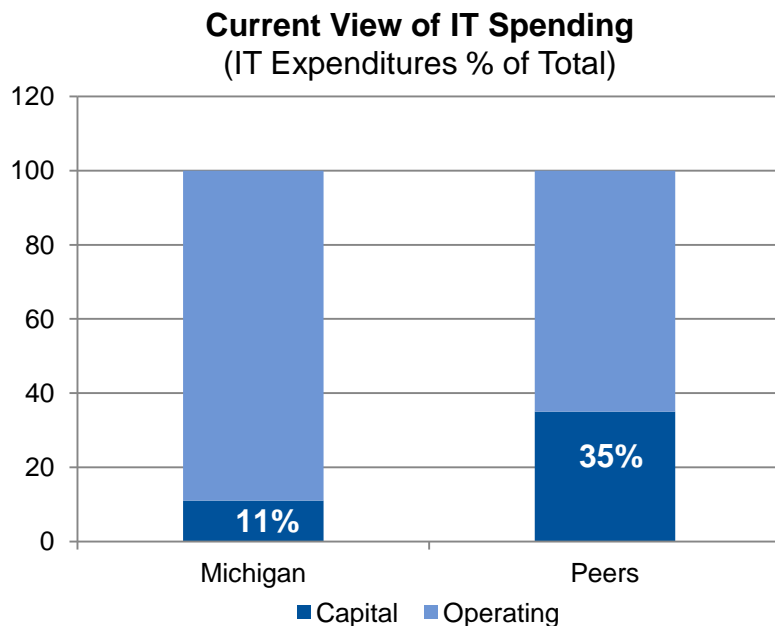
- Restructuring elements of ICT will underpin the road map and lead to more-satisfied customers, cost savings, better contracts, and more-efficient and effective service delivery.



Executive Summary — Measuring Success

Prospective Spending Model for Transformation

- Increased IT spending would fund the transformation road map and subsequent investments that will result from application rationalization, analysis of the data center and call centers, and the numerous other activities.



Prospective View Assumptions:

- IT spending increases by \$50M per year
- 90% of additional spending is allocated to capital projects or capital expense items
- Percentage of operating expenses could be reduced if:
 - Existing expense items are converted to capital expense items
 - Overall application maintenance costs are reduced

Executive Summary — Measuring Success

What Does the State Get for This Additional Investment?

- The current spending pattern limits the transformational and growth objectives of the State. Increased IT investment could support more-modern and efficient technologies, and serve to reduce future operational support costs resulting from aging infrastructure and applications developed using older technologies.
- Ultimately, an increase in IT investment will render a myriad of benefits for the State, including:
 - Modernized applications that are more cost-efficient and allow for better capabilities
 - Consumer-facing mobile applications that provide enhanced service and revenue generation
 - An increase in customer satisfaction and overall perception of the business value of IT services
 - An expanded mobile workforce to reduce brick-and-mortar costs and more efficiently serve citizen needs
 - Improved infrastructure and data storage and broadband services
 - Expanded shared service opportunities and partnerships
 - An automated procurement process
 - Efficient portfolio management to maximize enterprise value and TCO.
- Finally, this investment directly aligns with the vision of Governor Snyder for building a new Michigan for future generations.

“Together we can build a new Michigan for the new century. We can make the old unbelievable and the new achievable. And we can make the improbable the new exciting reality for our children and theirs. We can and indeed we must begin right now to build a Michigan where the next generation has the chance to live, to work, to play, to prosper.”

Analyze Phase

Gartner Approach

Analyze Phase

Overview and Approach — Analyze Phase

- After initial planning activities were executed, Gartner launched its Analyze Phase, which included a number of qualitative and quantitative activities intended to understand current capabilities and performance, provide key benchmark data, gauge customer needs and perceptions of DTMB, and define a target state to yield a gap analysis that would feed the Strategize Phase.

Plan	Analyze				Strategize		
	Major Tasks						
Project Plan and Management	Baseline Assessment	State Business Needs	Business, Services and Technology Opportunities	Maturity and Gap Analysis	Recommend	Road Map	Final Report
	Key Activities						
<ul style="list-style-type: none"> Project Planning and Orientation Project Kickoff Data Collection Planning and Tools Overview Finalize Project Work Plan Finalize Project Communication and Administrative Activities 	<ul style="list-style-type: none"> Initiate data-collection instruments (surveys, BM templates, documents) Conduct business and IT interviews Understand MI ICT's vision, and service and operating models Document Current State Environment Report 	<ul style="list-style-type: none"> Review current and future ICT needs and priorities based on current state evaluation and analysis of ICT strategies and IT leaders' future vision Aggregate and summarize business and technology interviews into business needs Develop State Business Needs Report 	<ul style="list-style-type: none"> Define viable business, services and technology improvement scenarios Identify potential risks and mitigation strategies Analyze improvement scenarios against MI requirements to determine viability Identify shared-services opportunities 	<ul style="list-style-type: none"> Integrate comprehensive analysis and assessments Evaluate IT capabilities against peers utilizing benchmarking analysis for Technology, People and Processes, and Capabilities Evaluate IT capabilities to meet State business direction, vision and goals 	<ul style="list-style-type: none"> Develop Business Model and Technology Solutions recommendations Expand recommendations and provide additional detail and due diligence Review recommendations with Governor's office, DTMB and IT advisors 	<ul style="list-style-type: none"> Develop implementation strategy and plan 	<ul style="list-style-type: none"> Develop Final Report Develop Recommendations Summary Presentation Develop Communications Plan Develop Change Management Plan Conduct Executive Presentation
	Deliverables						
<ul style="list-style-type: none"> Final Project Plan Status Reports (ongoing) 	<ul style="list-style-type: none"> Deliverable A — Evaluation of Current State Environment Deliverable B — Evaluation of the State's Business Needs Deliverable C — Identification of Business, Services and Technology Opportunities Deliverable D — Maturity and Gap Analysis 				<ul style="list-style-type: none"> Deliverable E — Recommendations for Business Model Alternatives Deliverable F — Road Map to Implementation Deliverable G — Final Report and Executive Presentation 		
	How well does DTMB currently operate?	Which current and future needs must DTMB address?	Which opportunities can DTMB capitalize on?	Which gaps and areas of improvement can DTMB address?	Which investments and activities does Gartner recommend?	How does the State implement the recommendations?	How do we best communicate the plan for action to stakeholders?

TOPSS Analysis Framework

- The foundation of Gartner's analysis was built on the Technology, Organization, Process, Strategy and Service Levels (TOPSS) framework, which was overlaid on Gartner's ITScore Model.



Analyze Phase

TOPSS Maturity Model: Criteria Tailored to the Nine IT Roles to Assess Maturity for Each Area

- Gartner started with a set of global criteria for all five maturity levels (i.e., Ad Hoc to Optimized), and then tailored them to be germane to the nine IT roles. This ensured that the maturation path for each IT role was clear, and that the gaps identified were specific to that role.

	1—Ad Hoc	2—Managed	3—Challenged	4—Managed	5—Optimized
Technology	<p>Use of limited IT systems to support the role, but the systems are not standardized. Common attributes, where applicable to the IT role, include:</p> <ul style="list-style-type: none"> * The effectiveness is standard. * Size of IT team. * No replication. 	<p>Systems and tools are in place to support the role, but the systems are not standardized. Common attributes, where applicable to the IT role, include:</p> <ul style="list-style-type: none"> * The effectiveness is standard. * Key standards and standards are in place. 	<p>Systems and tools are in place to support the role, but the systems are not standardized. Common attributes, where applicable to the IT role, include:</p> <ul style="list-style-type: none"> * The effectiveness is standard. * Key standards and standards are in place. * Some have been significantly customized to meet user needs. 	<p>Systems and tools are in place to support the role, but the systems are not standardized. Common attributes, where applicable to the IT role, include:</p> <ul style="list-style-type: none"> * The effectiveness is standard. * Key standards and standards are in place. * Some have been significantly customized to meet user needs. 	<p>Systems and tools are in place to support the role, but the systems are not standardized. Common attributes, where applicable to the IT role, include:</p> <ul style="list-style-type: none"> * The effectiveness is standard. * Key standards and standards are in place. * Some have been significantly customized to meet user needs.
Organization	<p>No clear organizational structure or well-defined roles and responsibilities. Common attributes, where applicable to the IT role, include:</p> <ul style="list-style-type: none"> * No clear organizational structure or well-defined roles and responsibilities. * No clear organizational structure or well-defined roles and responsibilities. 	<p>Clear organizational structure and well-defined roles and responsibilities. Common attributes, where applicable to the IT role, include:</p> <ul style="list-style-type: none"> * Clear organizational structure and well-defined roles and responsibilities. * Clear organizational structure and well-defined roles and responsibilities. 	<p>Clear organizational structure and well-defined roles and responsibilities. Common attributes, where applicable to the IT role, include:</p> <ul style="list-style-type: none"> * Clear organizational structure and well-defined roles and responsibilities. * Clear organizational structure and well-defined roles and responsibilities. 	<p>Clear organizational structure and well-defined roles and responsibilities. Common attributes, where applicable to the IT role, include:</p> <ul style="list-style-type: none"> * Clear organizational structure and well-defined roles and responsibilities. * Clear organizational structure and well-defined roles and responsibilities. 	<p>Clear organizational structure and well-defined roles and responsibilities. Common attributes, where applicable to the IT role, include:</p> <ul style="list-style-type: none"> * Clear organizational structure and well-defined roles and responsibilities. * Clear organizational structure and well-defined roles and responsibilities.
Process	<p>Processes to support the IT role are not defined or are poorly defined. Common attributes, where applicable to the IT role, include:</p> <ul style="list-style-type: none"> * Processes to support the IT role are not defined or are poorly defined. * Processes to support the IT role are not defined or are poorly defined. 	<p>Processes to support the IT role are defined and documented. Common attributes, where applicable to the IT role, include:</p> <ul style="list-style-type: none"> * Processes to support the IT role are defined and documented. * Processes to support the IT role are defined and documented. 	<p>Processes to support the IT role are defined and documented. Common attributes, where applicable to the IT role, include:</p> <ul style="list-style-type: none"> * Processes to support the IT role are defined and documented. * Processes to support the IT role are defined and documented. 	<p>Processes to support the IT role are defined and documented. Common attributes, where applicable to the IT role, include:</p> <ul style="list-style-type: none"> * Processes to support the IT role are defined and documented. * Processes to support the IT role are defined and documented. 	<p>Processes to support the IT role are defined and documented. Common attributes, where applicable to the IT role, include:</p> <ul style="list-style-type: none"> * Processes to support the IT role are defined and documented. * Processes to support the IT role are defined and documented.
Strategy	<p>No clear strategy or planning function. Common attributes, where applicable to the IT role, include:</p> <ul style="list-style-type: none"> * No clear strategy or planning function. * No clear strategy or planning function. 	<p>Clear strategy and planning function. Common attributes, where applicable to the IT role, include:</p> <ul style="list-style-type: none"> * Clear strategy and planning function. * Clear strategy and planning function. 	<p>Clear strategy and planning function. Common attributes, where applicable to the IT role, include:</p> <ul style="list-style-type: none"> * Clear strategy and planning function. * Clear strategy and planning function. 	<p>Clear strategy and planning function. Common attributes, where applicable to the IT role, include:</p> <ul style="list-style-type: none"> * Clear strategy and planning function. * Clear strategy and planning function. 	<p>Clear strategy and planning function. Common attributes, where applicable to the IT role, include:</p> <ul style="list-style-type: none"> * Clear strategy and planning function. * Clear strategy and planning function.
Service Levels	<p>No service level agreements or metrics for which they are accountable to either end customers or other groups within CTIOG.</p>	<p>Service level agreements or metrics for which they are accountable to either end customers or other groups within CTIOG.</p>	<p>Service level agreements or metrics for which they are accountable to either end customers or other groups within CTIOG.</p>	<p>Service level agreements or metrics for which they are accountable to either end customers or other groups within CTIOG.</p>	<p>Service level agreements or metrics for which they are accountable to either end customers or other groups within CTIOG.</p>

CIO: Business Alignment and Effectiveness

CIO: Operations Management

Applications

Program and Portfolio Management

Business Intelligence and Performance Mgt.

Enterprise Architecture

Infrastructure and Operations

IT Sourcing and Vendor Management

Security and Risk Management

Analyze Phase

Alignment with State Project Goals and Assessment Methods Utilized, by Role

- Gartner employed a combination of qualitative and quantitative tools to assess each role depending on: 1) The nature of the functions within the role, and 2) The suitability of a direct comparison to peer groups versus measuring alignment with industry best practices.

IT Role	SOM Processes and Capabilities	Qualitative Assessment Methods	Quantitative Assessment Methods
1. CIO: Business Alignment and Effectiveness	<ul style="list-style-type: none"> ■ Collaboration, Partnerships and Shared Services ■ IT Agency/Business Operational Model ■ Customer Service Management and Operations 	<ul style="list-style-type: none"> ■ Maturity Scale (Best Practices) ■ ITScore/Gartner Research ■ Interviews/Documentation 	<ul style="list-style-type: none"> ■ ITBE
2. CIO: Operations Management	<ul style="list-style-type: none"> ■ People: Human Resources ■ Governance ■ Organizational Structure ■ Change and Innovation Management ■ Social Media Strategy ■ Communications ■ Budgeting, Financial Management and Rate Structure Comparisons 	<ul style="list-style-type: none"> ■ Maturity Scale (Best Practices) ■ ITScore/Gartner Research ■ Interviews/Documentation Review 	<ul style="list-style-type: none"> ■ ITBE ■ Applications Benchmark ■ Infrastructure Benchmark ■ Skills Inventory
3. Applications	<ul style="list-style-type: none"> ■ Application Technologies and Services ■ Web and Portal Services 	<ul style="list-style-type: none"> ■ Maturity Scale (Best Practices) ■ ITScore/Gartner Research ■ Interviews/Documentation Review 	<ul style="list-style-type: none"> ■ Applications Benchmark ■ Skills Inventory

Analyze Phase

Alignment with State Project Goals and Assessment Methods

IT Role	SOM Processes and Capabilities	Qualitative Assessment Methods	Quantitative Assessment Methods
4. Program and Portfolio Management	<ul style="list-style-type: none"> Program and Portfolio Management 	<ul style="list-style-type: none"> Maturity Scale (Best Practices) ITScore/Gartner Research Interviews/Documentation Review 	<ul style="list-style-type: none"> Skills Inventory
5. Business Intelligence and Performance Mgt.	<ul style="list-style-type: none"> Accountability and Performance Management 	<ul style="list-style-type: none"> Maturity Scale (Best Practices) ITScore/Gartner Research Interviews/Documentation Review 	<ul style="list-style-type: none"> Skills Inventory
6. Enterprise Architecture	<ul style="list-style-type: none"> Information Management Enterprise Architecture 	<ul style="list-style-type: none"> Maturity Scale (Best Practices) ITScore/Gartner Research Interviews/Documentation Review 	<ul style="list-style-type: none"> Skills Inventory
7. Infrastructure and Operations	<ul style="list-style-type: none"> Infrastructure Platforms and Services Communications and Network Cloud Environment Options Mobility 	<ul style="list-style-type: none"> Maturity Scale (Best Practices) ITScore/Gartner Research Interviews/Documentation Review 	<ul style="list-style-type: none"> Infrastructure Benchmark Skills Inventory
8. IT Sourcing and Vendor Management	<ul style="list-style-type: none"> Sourcing and Procurement IT Vendor Management 	<ul style="list-style-type: none"> Maturity Scale (Best Practices) ITScore/Gartner Research Interviews/Documentation Review 	<ul style="list-style-type: none"> Peer Comparison Skills Inventory
9. Security and Risk Management	<ul style="list-style-type: none"> Security, Risk Management and Disaster Recovery, Business Continuity 	<ul style="list-style-type: none"> Maturity Scale (Best Practices) ITScore/Gartner Research Interviews/Documentation Review 	<ul style="list-style-type: none"> Skills Inventory

Analyze Phase

Gartner's Integrated IT Assessment Approach

- Gartner applied a number of proven qualitative and quantitative tools and approaches to ensure a thorough analysis of ICT that analyzes the State of Michigan from a qualitative and quantitative perspective, where appropriate.
 - **Qualitative Aspects** — Process maturity, customer perceptions, alignment with best practices, etc.
 - **Quantitative Aspects** — Staffing, rates, spending, etc.
- Using these tools and techniques, Gartner rendered a rating for each TOPSS element within each IT role for the current state and the target state. Collectively, an overall score was assessed.
 - **For instance, if Enterprise Architecture received a 2 for Technology, 3 for Organization, 2 for Process, 2 for Strategy and 2 for Service Level, the overall maturity rating for Enterprise Architecture would be 2.**
- The maturity scale is developed on an idealized basis, meaning that a Level 5 is the absolute best practice in the industry for that activity. Relatively few organizations make the investment to become Level 5 in all the areas, because it would be prohibitively expensive to do so without a commensurate payback.
- Target states were determined using a combination of feedback from DTMB customers' stated needs, and DTMB leadership's stated goal of becoming a best-in-class service provider. If achieved, the target states chosen will very likely exceed the performance of the vast majority of (if not all) public-sector organizations.
- The subsequent slides illustrate the individual maturity models for Technology, Organization, Process, Strategy and Service Level.

Analyze Phase

Technology Key Findings

Analyze Phase

TOPSS Maturity Model: Technology

1 — Ad Hoc	2 — Reactive	3 — Challenged	4 — Managed	5 — Optimized
<p>No or limited IT systems or tools in place to support the role. Common attributes, where applicable to the IT role, include:</p> <ul style="list-style-type: none"> ■ Ineffective to no standards; ■ Siloed IT domains; ■ No consolidation; ■ Ad hoc services; ■ Limited to no metrics; ■ Limited tool deployment and usage. 	<p>IT systems and tools are present to support the role; however, there is no coordination or standardization across the enterprise. Common attributes, where applicable to the IT role, include:</p> <ul style="list-style-type: none"> ■ Ineffective systems and moderate-to-complex workarounds exist; ■ Key standards exist and are enforced; ■ Project/Program-specific tools; ■ Duplicative tools; ■ Some technical metrics in place; ■ Reactive monitoring. 	<p>IT systems and tools are in place to support the role, but have been procured without suitable alignment to user and operational requirements. Common attributes, where applicable to the IT role, include:</p> <ul style="list-style-type: none"> ■ Ineffective systems and moderate workarounds exist; ■ System have been significantly customized to meet end-user needs; ■ Policy-driven standards; ■ Domain-centric management tools; ■ Pre-emptive management of critical components; ■ Operational management toolset; ■ Differentiated service-based technology; ■ Standardized refresh of IT components. 	<p>IT support systems are in place to support the IT role across the enterprise and are consistently used. Common attributes, where applicable to the IT role, include:</p> <ul style="list-style-type: none"> ■ System procurement and design incorporated end-user and enterprise needs; ■ Systems have been implemented with a minimal amount of customization; ■ Systems integrated into enterprise architecture; ■ Heavy virtualization; ■ Metrics-driven performance; ■ Service- and performance-aligned architecture; ■ Operations automation; ■ Consolidated environment (domain-level consolidation). 	<p>IT support systems are in place and support the enterprise's ability to improve and optimize operational performance. Common attributes, where applicable to the IT role, include:</p> <ul style="list-style-type: none"> ■ System flexibility to adapt to changing business and operational needs without requiring large levels of customization; ■ Highly scalable and elastic architecture; ■ Practices innovation and deploying new technology; ■ Dynamic resource allocation; ■ Business service tools; ■ Real-time enterprise; ■ Technology Research and Development.

Analyze Phase

Technology Key Findings

Technology



CIO: Business Alignment and Effectiveness

CIO: Operations Management

Applications

Program and Portfolio Management

Business Intelligence and Performance Management

Enterprise Architecture

Infrastructure and Operations

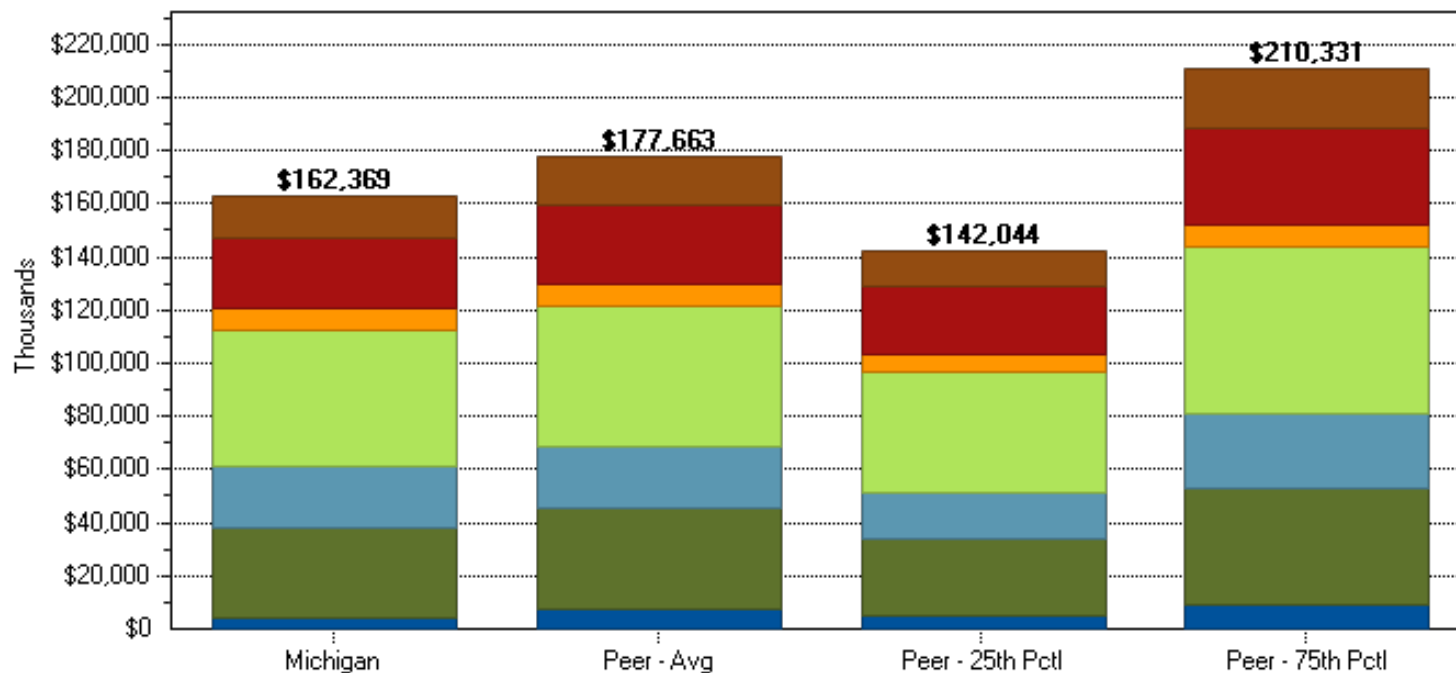
IT Sourcing and Vendor Management

Security and Risk Management

- From a technology perspective, a number of key findings and recommendations resulted from the Gartner study.
- Infrastructure Services as a centralized service showed signs of higher maturity, but also could benefit from increased automation and virtualization.
- Benchmarking revealed a number of aging applications that exhibit high support costs, which could be ripe for replacement or modernization.
- DTMB should aim to reduce 50+ application tools by at least 50%, and standardize application development processes.
- Call center and data center issues warrant further analysis on sourcing and consolidation opportunities.
- DTMB should institutionalize an enterprise wide Project Portfolio Management (PPM) tool and use more automated, integrated PPM tools.
- Although process and organization changes must precede any procurement, acquiring an eProcurement system can provide ample benefits for DTMB.
- DTMB should perform vulnerability scanning and compliance, and also increase technology training.

Analyze Phase

Technology Key Findings Rationale — Total Spending by Infrastructure Functional Area



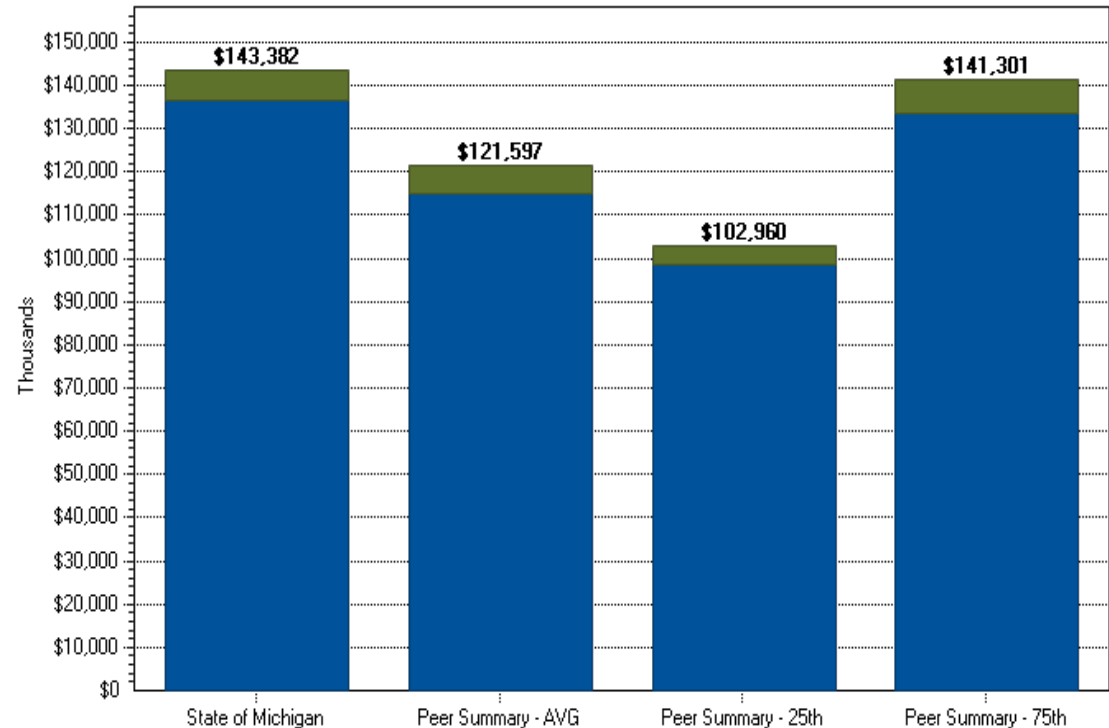
	Michigan	Peer - Avg	Peer - 25th Pctl	Peer - 75th Pctl
Mainframe	\$4,487	\$7,084	\$4,580	\$8,850
Servers - Unix and Wintel	\$33,740	\$38,169	\$28,931	\$43,814
Storage	\$22,657	\$23,507	\$18,078	\$28,242
Client & Peripherals	\$51,384	\$52,838	\$44,910	\$62,593
IT Help Desk	\$8,196	\$8,244	\$7,052	\$8,888
Data Networking	\$26,300	\$29,255	\$25,210	\$35,645
Voice Telecom	\$15,604	\$18,566	\$13,283	\$22,300

Analyze Phase

Technology Key Findings Rationale — Total Application Support Spending

- State of Michigan spend for Applications Sustainment, at \$143.4M, is within range of the peer 75th percentile.
- State of Michigan IT spend for Non-ERP aligns more closely with the peer 75th percentile, while spend for ERP applications is almost the same as the peer average.

Spend by Functional Area



	State of Michigan	Peer Summary - AVG	Peer Summary - 25th	Peer Summary - 75th
Application Support	\$136,744	\$115,017	\$98,587	\$133,427
Application Support - ERP	\$6,639	\$6,580	\$4,373	\$7,874

Analyze Phase

Technology Key Findings Rationale — Initial Application Modernization Candidates for Further Investigation

- A major area of cost-savings and benefits-realization opportunity relates to the State's aging application portfolio. By performing business cases and through strategic sourcing, the State can save millions in software, hardware and support costs. In an effort to jump-start the application rationalization process, Gartner identified initial candidates for the State to investigate that can be further evaluated from a business value, technical quality and cost perspective.
- The Sales, Use and Withholding (SUW) application is a 30-year-old application that brings in \$13.7B in revenue for the State. SUW is the ideal candidate to replace because it will reduce support costs, improve customer service, improve audit functionality and allow the implementation of a streamlined sales tax.

Agency	Application Name	Total Cost	Type	Application Age	Cost per FP
DHS	MICES	\$5,870,241	In-house	9.00	\$848
DTMB	MAIN (Mainframe)	\$5,424,734	Outsource	17.00	\$186
DTMB	Vision ORS (Clarety)	\$2,220,569	In-house	10.00	\$251
DTMB	DCDS (Data Collection and Distribution System)	\$1,550,765	In-house	16.00	\$786
Mich.gov	Michigan.gov	\$1,198,209	In-house	12.00	\$365
DTMB	MAIN (Web components: C&PE and ETP)	\$1,096,994	Outsource	12.00	\$214
DCH	Cost Settlement	\$1,039,772	Outsource	22.00	\$42
MDOS	BOS (Driver/Vehicle MF backend)	\$1,024,565	In-house	31.00	\$179
MDOC	OMNI	\$784,538	In-house	17.00	\$68
MDOC	COMPAS	\$712,365	Vendor Package	6.00	\$468
TREA	STAR (State Treasury Account Receivable)	\$681,602	In-house	22.00	\$44
LARA Det UIA CR	UIA TAX Processing Application	\$602,284	In-house	22.00	\$58
WDASOM	One Stop Management Information System (OSMIS)	\$516,674	In-house	13.00	\$147
LARA Lan	Workers Compensation System (WORCS)	\$508,015	In-house	22.00	\$62
MSP	Criminal History Record (CHR)	\$493,330	In-house	7.00	\$192
MSP	MI Criminal Justice Information Network (MICJIN)	\$493,315	Vendor Package	10.00	\$576
DHS	CDC/Billing	\$462,695	In-house	11.00	\$497
WDASOM	Michigan Talent Bank (MTB)	\$457,980	In-house	14.00	\$222
DHS	CDC/IVR	\$428,006	Outsource	11.00	\$1,024
MDOS	Qualified Voter File (QVF)	\$412,108	Outsource	15.00	\$117
WDASOM	Michigan Adult Education Reporting System (MAERS)	\$229,915	In-house	12.00	\$260
LARA Lan	OBSASE	\$153,841	In-house	22.00	\$20
MDOC	Corrections Management Information System (CMIS)	\$75,738	In-house	22.00	\$12
MDOS	Branch Revenue (BR)	\$64,191	In-house	31.00	\$57

*It should be noted that the applications benchmarked by Gartner represent a subset of all State applications.

Analyze Phase

Technology Key Findings Rationale — Maturity, by IT Role

Current State = ○

Target State = ▲

IT Role	Current-State Maturity Rating	Future-State Maturity Rating	Key Actions to Close Gap
CIO: Business Alignment and Effectiveness	3	4	Application rationalization, implement mobility solutions, automate IT billing and accounting
CIO: Operations Management	2	4	Revise organizational model, consolidate service catalog and assign ownership, formalize innovation function
Applications	3	4	Eliminate legacy platform applications, reduce 50+ application tools by 50%, standardize app. dev. processes
Program and Portfolio Management	2	3	Institutionalize enterprisewide project management tool, more-automated, integrated PPM tools
Business Intelligence and Performance Management	2	4	Validate DW source data, align strategic and operational metrics, migrate from current tools to BusinessObjects
Enterprise Architecture	2	3	Redesign and Improve usefulness of EA repository, improve EA templates, tools and services
Infrastructure and Operations	3	4	Increase virtualization and adoption rate, increased automation, improve monitoring, define data center approach
IT Sourcing	2	5	Develop business case for e-procurement deployment, create contract portfolio scorecard, develop contract management system requirements
IT Vendor Management	1	3	
Security and Risk Management	3.5	4	Perform vulnerability scanning and compliance, increase technology training

1 — Ad Hoc

2 — Reactive

3 — Challenged

4 — Managed

5 — Optimized



Aggregate



Analyze Phase

Organization Key Findings

Analyze Phase

TOPSS Maturity Model: Organization

1 — Ad Hoc	2 — Reactive	3 — Challenged	4 — Managed	5 — Optimized
<p>No clear organizational structure or overall ownership of responsibilities for the IT role across the enterprise. Common attributes, where applicable to the IT role, include:</p> <ul style="list-style-type: none"> ■ “Hero-oriented” culture and reliance on individuals; ■ Low staffing levels; ■ Low skill sets; ■ Undefined roles and responsibilities; ■ Low customer confidence in IT; ■ Absence of, or Informal performance reviews; ■ Limited to no metrics to manage. 	<p>Ownership of IT support responsibilities within the enterprise exists, but the organization is immature and some of the appropriate skill sets are not present. Common attributes, where applicable to the IT role, include:</p> <ul style="list-style-type: none"> ■ Organizational structure is defined but it is not aligned for effective service delivery; ■ Technology-centric organization with tiered support; ■ Missing key organization functions/roles; ■ Inconsistently defined roles and responsibilities; ■ Limited staff development and training budgets; ■ Duplicative roles; ■ No succession planning; ■ Ad hoc governance; ■ Weak budget-level IT finance. 	<p>Organization fairly mature and exhibits some best practices. Skill sets largely align with IT support needs. Common attributes, where applicable to the IT role, include:</p> <ul style="list-style-type: none"> ■ Organizational structure is defined and aligned for effective service delivery; ■ Process-driven organization; ■ Consolidated organization with matrix management; ■ Alignment of resources by roles and skills; ■ Optimized or near-optimized staffing levels; ■ Working to adopt best practices; ■ Some competency centers established; ■ Comprehensive staff development programs; ■ Strong IT finance roles. 	<p>Organizational structure is defined and aligned for effective service delivery with appropriately resourced and skilled staff. Common attributes, where applicable to the IT role, include:</p> <ul style="list-style-type: none"> ■ Organizational structure is defined and aligned for effective service delivery with appropriately resourced and skilled staff; ■ Established program for ongoing training of resources; ■ Service-centric organization; ■ Service delivery-focused organization with strong relationship managers; ■ Trusted service provider to business; ■ Skills portfolio management; ■ Metrics-driven performance management; ■ Detailed role definition. 	<p>Organizational performance is evaluated, enhanced and rewarded based on defined objectives. Common attributes, where applicable to the IT role, include:</p> <ul style="list-style-type: none"> ■ Customer- and business-focused organization; ■ Virtual teaming; ■ Business/IT Staff rotation; ■ Developing best practices; ■ Focused staff development and training competency centers; ■ Business-driven metrics and resourcing.

Analyze Phase

Organization Key Findings

Organization



CIO: Business Alignment and Effectiveness

CIO: Operations Management

Applications

Program and Portfolio Management

Business Intelligence and Performance Management

Enterprise Architecture

Infrastructure and Operations

IT Sourcing and Vendor Management

Security and Risk Management

- From an organizational perspective, adapting to improve customer alignment and better use of resources were two of the major themes.
- Augmenting the business analyst and relationship management roles within DTMB is required to increase customer satisfaction and better manage the application portfolio.
- Instituting a solutions portfolio manager and service managers will ensure that DTMB is organized in a manner that best supports customer needs and efficiency goals.
- Use of pooled resources for infrastructure and application services will offer more flexibility and efficiency.
- Formal formulation of an innovation function under a Chief Technology Officer (CTO) will build off instances of innovation success and closely couple with enterprise architecture.
- Raising the ePMO within the organization to span DTMB will increase predictability and performance of project management activities.
- Bolstering the procurement function and formally establishing a vendor management function will lead to better contracts and vendor outcomes.

Analyze Phase

Organization Key Findings Rationale — Skills Assessment Methodology

- Developing a high-performing workforce requires developing both skills and competencies.
- The table below highlights the key differences between skills and competencies:

	Use	Difficulty in Application	Comments
Skills:	Defines “what” I can do	Easier to identify and develop	Necessary for solid performance but does not distinguish top performers
Competencies:	Defines “how” I perform my job	Harder to identify and develop	Underlying characteristics that are required for longer-term success

- DTMB selected 21 job families (e.g., Application Development, Customer Support, System Administration, etc.).
- Gartner used best-practice research to recommend a set of 10 foundational skills and five competencies for each job family to evaluate resource capabilities.
- Gartner conducted a workshop with 11 IT Leaders and Subject Matter Experts (SMEs) to validate/update identified skills and competencies.
- Skills inventory was anonymous and voluntary.
 - Gartner did not provide DTMB with any information at the individual level and did not disclose who completed or did not complete the survey.

Analyze Phase

Organization Key Findings Rationale — Skills Assessment Methodology (Cont'd)

- Employees performed the skill and competency self assessment during November 16th through November 23rd.
 - 1,363 employees took the survey — a 87% completion rate.
 - 181 employees did not take the survey.
- Managers did not validate employees' self-assessment.

Analyze Phase

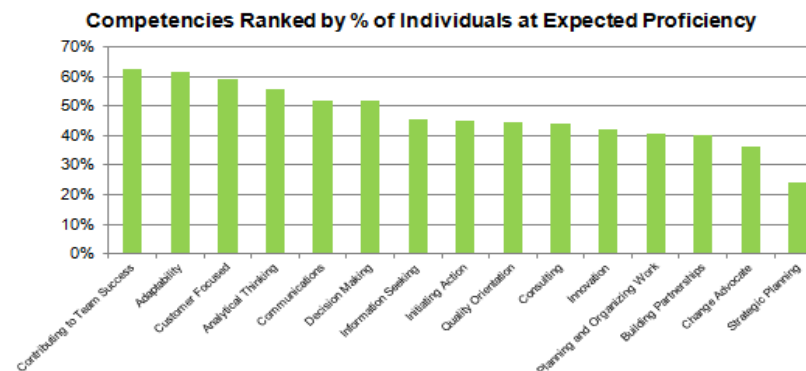
Organization Key Findings Rationale — Skills Assessment Findings

- DTMB's skill proficiency levels are higher than Gartner's industry benchmark data.
- As a rule of thumb, an IT organization should have 30% of critical skills at "Advanced" or "Master" levels. DTMB is at 38%, which **indicates an above-average overall skill maturity level**.

Industry Benchmark Skill Proficiency Comparison
% of Skills at Each Proficiency Level

	Limited	Basic	Intermediate	Advanced	Master
DTMB	6%	19%	37%	31%	7%
Public	8%	23%	35%	29%	6%
Private	7%	23%	38%	28%	5%

- IT staff stronger in competencies associated with performing IT work and weaker in competencies associated with business alignment.



Analyze Phase

Organization Key Findings Rationale — Skills Assessment Findings

- Job Family information, as collected by the survey, show that DTMB's job role distribution is typical to industry, but the Desktop Support job family counts appear low.
- Current DTMB titles are not meaningful in that job titles do not accurately describe what people do.
- DTMB has lower staffing levels in Client and Peripheral Support, Voice Network and Data Network as compared to Gartner's IT Key Metrics Data for State and Local Governments.
 - Lower percentage in Voice and Data Network is the result of the State outsourcing network and telecommunications services.
- There is no clear explanation of why Desktop Support numbers are lower in the DTMB survey. People may have misclassified themselves, or the people who did not take the survey tended to be desktop support personnel.

Technical Domain	DTMB Job Families in Skills Inventory (IT Leadership Distributed Across all Job Families)	IT Key Metrics Staffing Distribution	State of Michigan Staffing Distribution
Data Center	Computer Operations, Release Management, Quality Assurance, Systems Administration, Database Administration, Web Administration	16%	21.2%
Client and Peripheral Support	Client Technology/Desktop Support	14%	8.9%
Voice Network	Telecommunications	7%	4.2%
Data Network	Network Management	10%	2.9%
IT Help Desk	Customer Support/Help Desk	10%	7.9%
Applications	Application Development, Business Analysis, Business Intelligence, Database Analysis, Web Design	29%	35.7%
IT Management	Architecture, Business Continuance, IT Security, Project Management, Relationship Management	14%	19.2%

Analyze Phase

Organization Key Findings Rationale — Skills Assessment Findings

Job Family	Highly Qualified	Qualified	Less-Qualified	Total HC	Strength (% HQ+Q)	Rank
Client Technology/Desktop Support	31	38	32	101	68%	High
Web Administration	4	3	5	12	58%	
Quality Assurance	7	4	10	21	52%	
Systems Administration	25	14	43	82	48%	
Application Development	48	78	163	289	44%	
Network Management	6	7	19	32	41%	
Database Analysis	2	3	8	13	38%	Med
Database Administration	14	7	35	56	38%	
Web Design	5	8	22	35	37%	
Telecommunications	7	8	32	47	32%	
IT Security	2	5	15	22	32%	
Business Analysis	3	13	37	53	30%	
Architecture	3	6	22	31	29%	Low
Business Intelligence	1	3	10	14	29%	
Project Management	12	16	80	108	26%	
Customer Support/Help Desk	4	19	66	89	26%	
Computer Operations	1	12	46	59	22%	
IT Leadership	10	17	96	123	22%	
Business Continuance	1	0	4	5	20%	
Release Management	1	1	8	10	20%	
Relationship Management	2	1	38	41	7%	

Analyze Phase

Organization Key Findings Rationale — Skills Assessment Findings

- DTMB shows the highest level of capabilities in Desktop Support and most infrastructure job families.
- Individuals currently in Relationship Management show lowest capability relative to the other job families. The low marks for Relationship Management probably reflect the newness of the role.
- To quantify the current capabilities of DTMB, a qualification score (“Q score”) was calculated for all 1,363 participants. The Q score is based on a combination of an individual’s proficiency in the five competencies and 10 foundational skills associated with the different job families.

Analyze Phase

Organization Key Findings Rationale — Bench Strength

- There exists significant “bench strength” across DTMB. Individuals in different job families have many of the skills to perform other roles.
- Each individual was evaluated for all 21 job functions. Table shows the number of FTEs who are in a different role but have strong capabilities in the different job families.
- Because of the need to ensure anonymity, managers did not validate the survey response. DTMB will need to validate skills and identify suitable roles through its regular employee performance management practices.

Highly Qualified and Qualified FTEs currently in Different Job Families

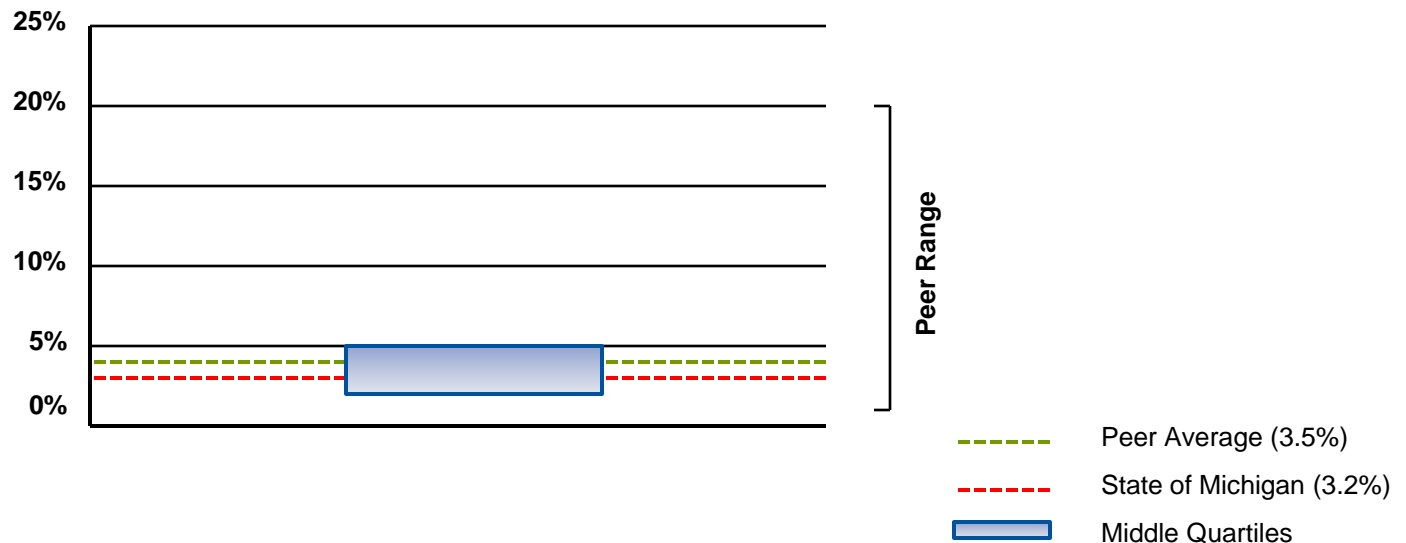
Job Family	High Qualified	Qualified	Total
Application Development	43	122	165
Architecture	21	71	92
Business Analysis	37	123	160
Business Continuation	11	50	61
Business Intelligence	29	81	110
Client Technology / Desktop Support	67	144	211
Computer Operations	34	125	159
Customer Support / Help Desk	42	132	174
Database Administration	22	64	86
Database Analysis	44	65	109
IT Leadership	17	66	83
IT Security	20	79	99
Network Management	13	62	75
Project Management	25	87	112
Quality Assurance	49	93	142
Relationship Management	15	48	63
Release Management	23	79	102
Systems Administration	48	107	155
TeleCommunications	22	71	93
Web Administration	25	51	76
Web Design	30	84	114

Analyze Phase

Organization Key Findings Rationale — IT Employees as a Percentage of Total Employees

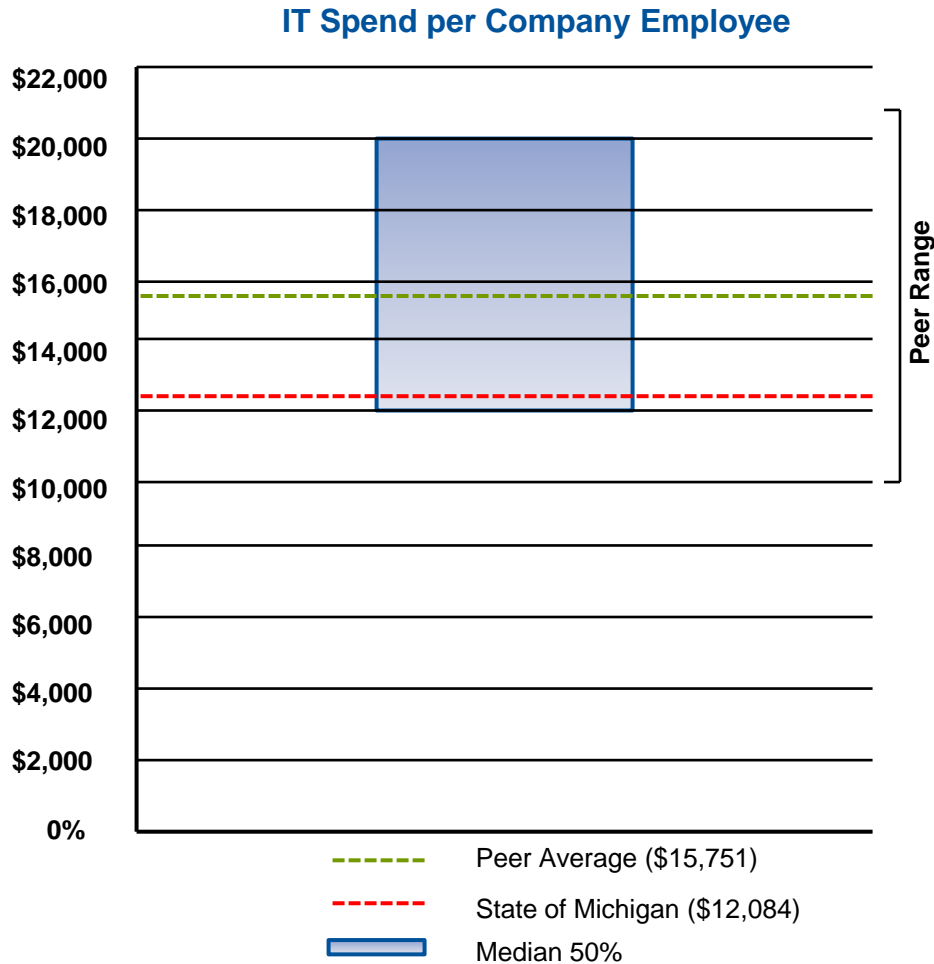
- As expected when assessing the State from a personnel perspective, the total percentage of IT employees to all State of Michigan employees is 3.2%, which is lower than the average for all state and local governments, 3.5%, but relatively close to the norm.
- The lower ratio was anticipated because Michigan is one of the few states and commonwealths that has benefited from increased efficiencies borne through consolidation of operations and shared services.

State and Local Governments: % of IT to Total Employees



Analyze Phase

Organization Key Findings Rationale — IT Spending per Company Employee



- Another way to view to IT spending is on a per-employee basis, which provides insight into the amount of technology support an organization's workforce receives.
- High spending can imply higher levels of automation and/or higher investment in IT in general. Low spending levels can be related to higher overall staffing levels and/or lower IT investment than peers.
- As depicted in the graph to the left, the State of Michigan spends approximately \$12,084 per employee, while the peer organization average is \$15,751 per employee, a second indicator of significantly lower funding of IT as compared to peers.
- To help emphasize the State of Michigan's IT spending in comparison to peers, with its 47,918 employees*, the State of Michigan under-spends peers by approximately \$175M in aggregate, annually.

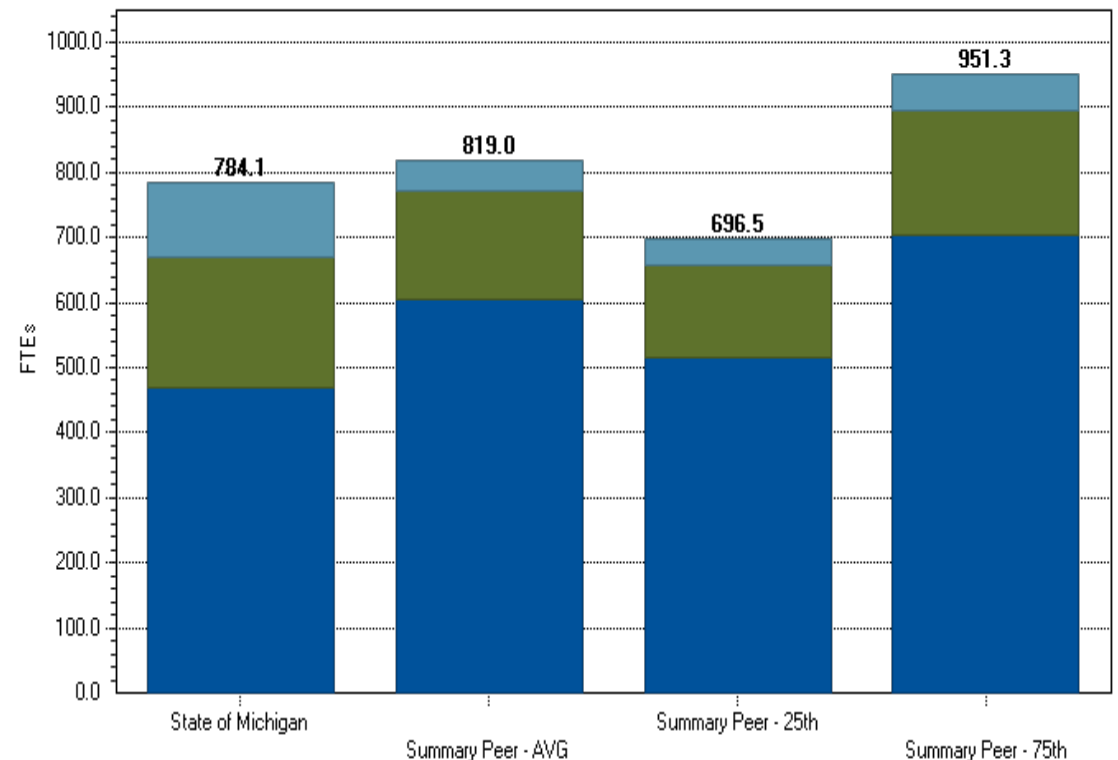
*Source: Michigan Civil Service Commission HWF2, 2011

Analyze Phase

Organization Key Findings Rationale — High Ratio of Contractors and Outsourced Resources

- State of Michigan's staff size, at 784.1 FTEs, is 4% less than the peer average.
- State of Michigan supplemental workforce, which includes both contractors and outsourced resources, represents 40% compared with the peer at 26% (315.5 FTEs compared with 214.2 FTEs for the peer average).
- State of Michigan's cost per FTE, at \$129, is 18% higher than the peer group average, primarily driven by high contractor costs.

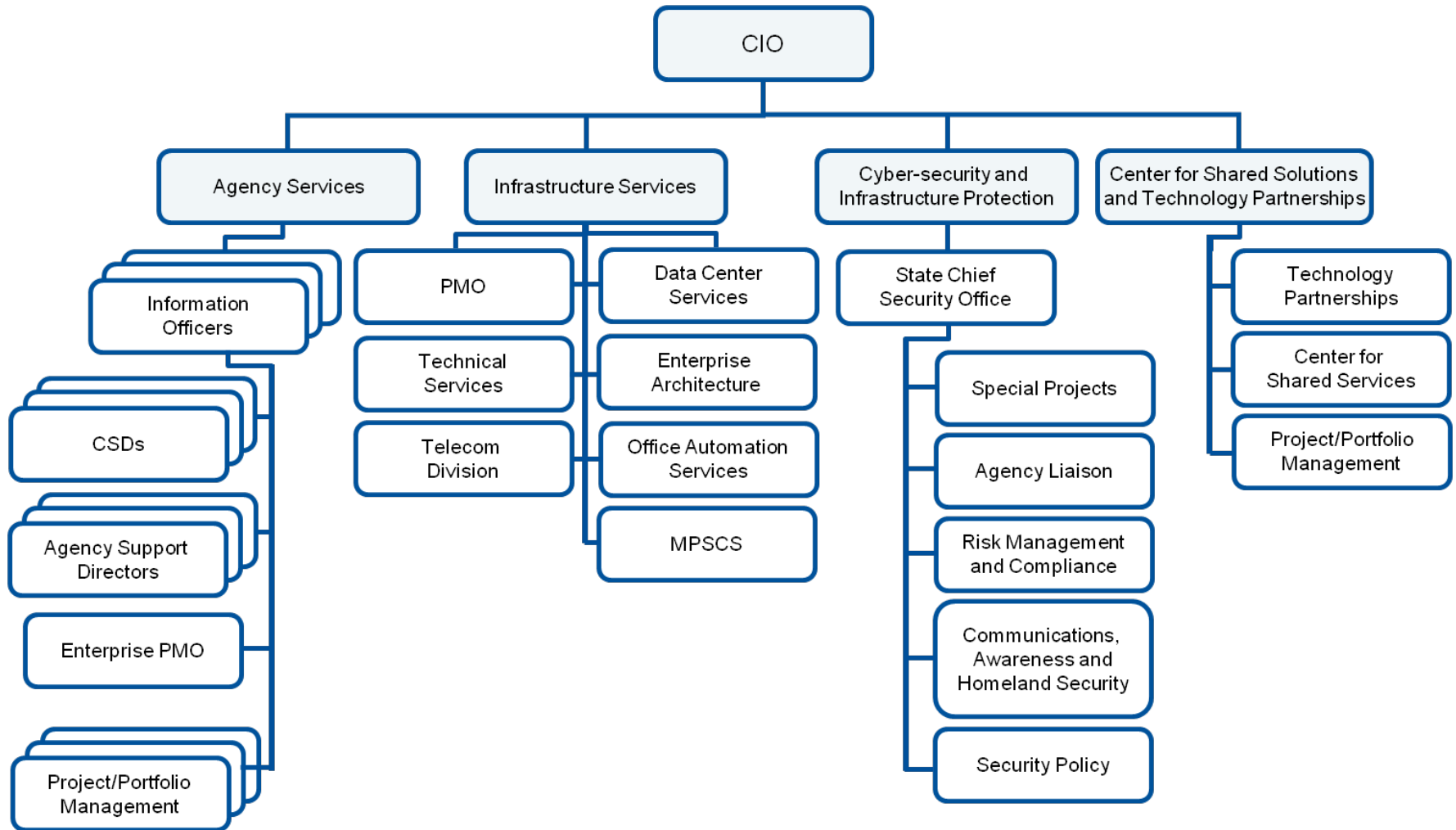
FTE by Source



	State of Michigan	Summary Peer - AVG	Summary Peer - 25th	Summary Peer - 75th
Insourced	468.6	604.8	514.0	702.5
Contractor	202.7	167.2	142.7	194.1
Outsourced	112.8	47.0	39.8	54.7

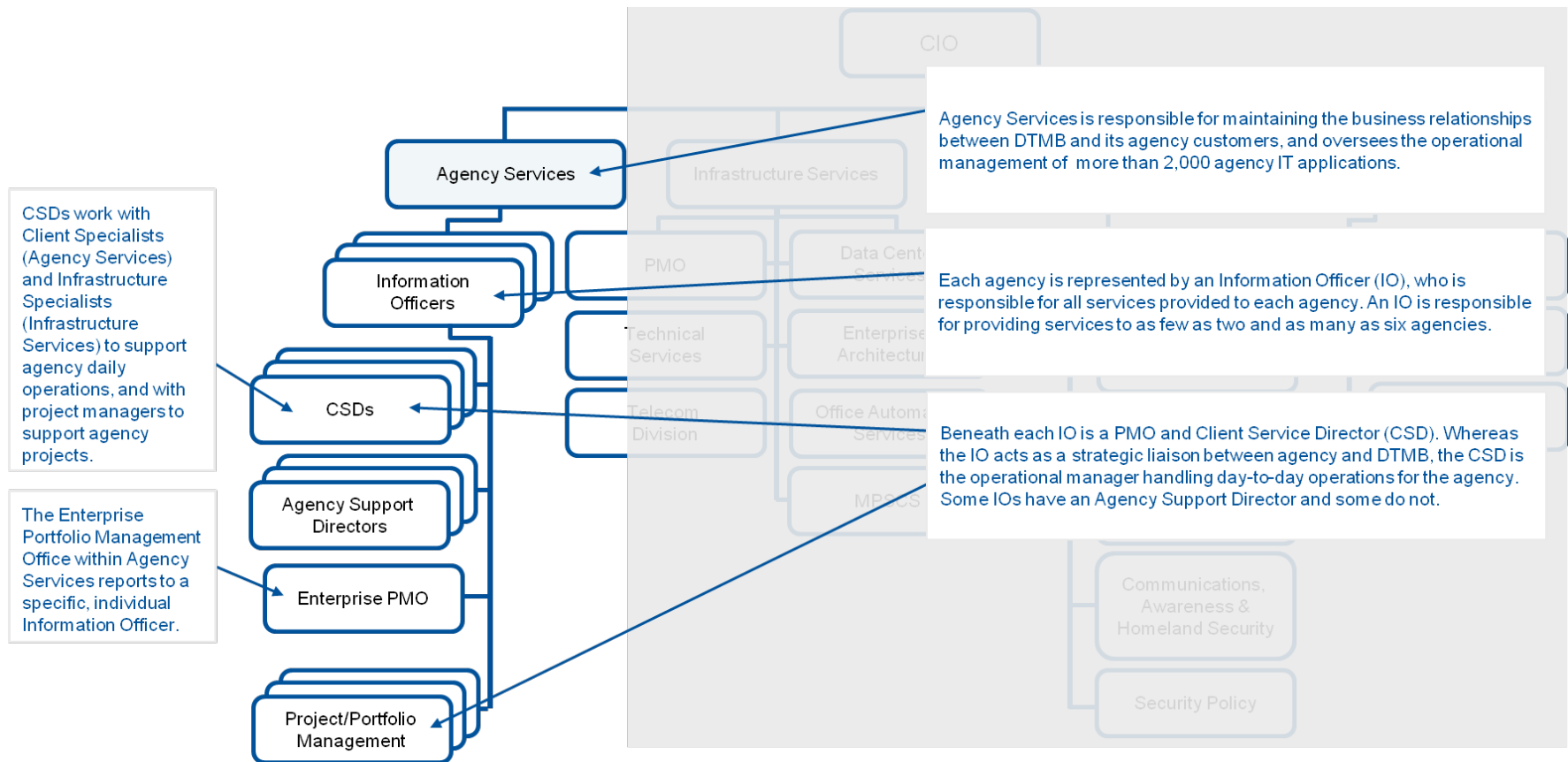
Analyze Phase

Organization Key Findings Rationale — Current IT Organization Chart



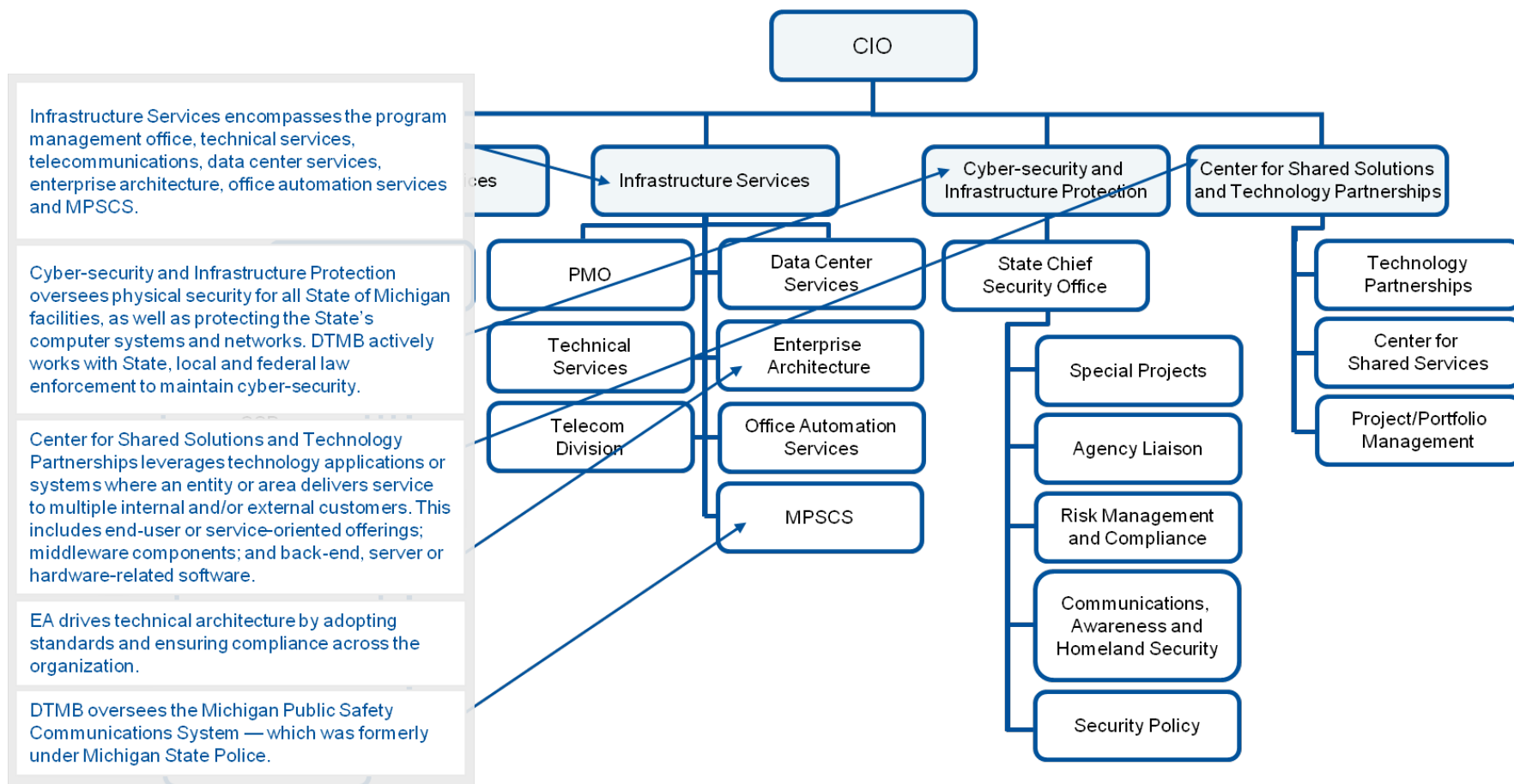
Analyze Phase

Organization Key Findings Rationale — Agency Services Overview



Analyze Phase

Organization Key Findings Rationale — Infrastructure Services, Security and Shared Solutions Overview



Analyze Phase

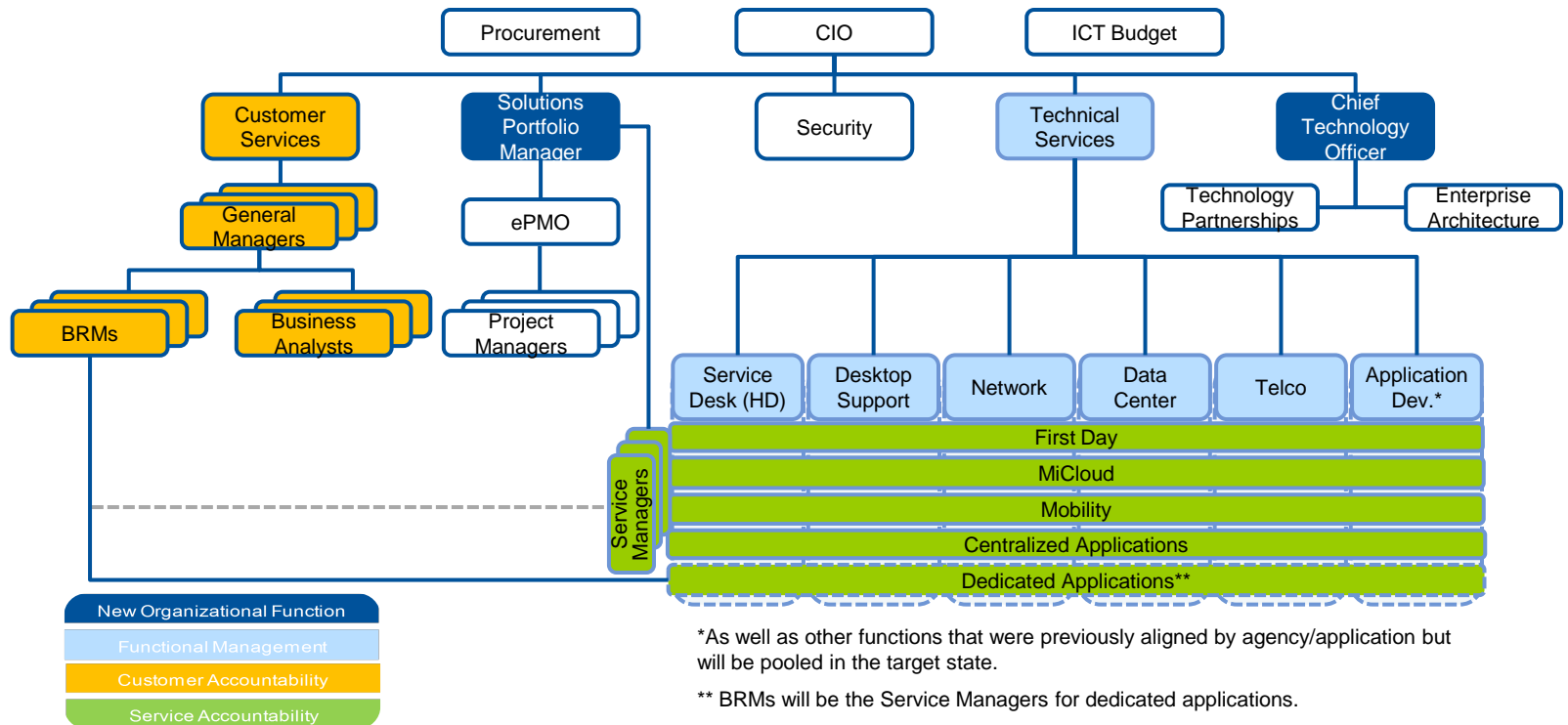
Organization Key Findings Rationale — Summary of Findings

Strengths	Weaknesses
<ul style="list-style-type: none">■ DTMB staff is largely regarded by customers as adequately skilled to provide basic IT services. The Job Skills Assessment showed that DTMB ranked above-average from an overall skills perspective, with 38% of self-assessed skills being at “Advanced” or “Master” levels.■ The Agency Services organizational model has placed accountability and ownership for customer needs at the IO level in an effort to make DTMB more responsive to customer needs. This “ownership” organizational model aligns with DTMB’s vision to be customer-centric.	<ul style="list-style-type: none">■ The integration and communication between State of Michigan agencies, Agency Services and Infrastructure Services is problematic for the following reasons:<ul style="list-style-type: none">– DTMB is organized to deliver on technology and IT goals, not business- or customer-oriented solutions and goals.– DTMB is organized around functional silos that do not have end-to-end responsibility or accountability for the service supplied to the customer.– A high degree of variability exists with regard to the relationship IOs have with agency customers, and IOs are often working with agencies at an operational level.– IOs are held accountable, but have no authority over infrastructure services.– Functional silos prevent sharing of resources and expertise; successes in one functional silo do not translate into victories in another.■ Enterprise Architecture reports to head of infrastructure services, weakening enterprisewide impact, accountability and authority.■ DTMB currently has a Chief Technology Officer, but that role is combined with Director of Infrastructure Services. Gartner contends the CTO must exist in a stand-alone department in charge of innovation.<ul style="list-style-type: none">– No specific owner or product manager for innovation and introduction of new technologies (e.g., Mobility) to DTMB’s customers.

Analyze Phase

Organization Key Findings Rationale — Potential Target-State Functional Model

- Gartner identified a number of organizational recommendations that can help DTMB become more effective in meeting its objectives. To assist DTMB in exploring potential organizational changes driven by these recommendations, Gartner has developed an example of a functional model that DTMB can utilize for future organizational planning.



Analyze Phase

Organization Key Findings Rationale — Maturity, by IT Role

Current State = ○

Target State = ▲

IT Role	Current-State Maturity Rating	Future-State Maturity Rating	Key Actions to Close Gap
CIO: Business Alignment and Effectiveness	3	4	Develop closer relationships with customer agencies, start succession planning, extend IO model to state, local, federal
CIO: Operations Management	2	4	Define operating model, address Agency Services technical silos, identify service portfolio and innovation owners
Applications	2	4	Improve business analyst function, pool Agency Service application development and support resources
Program and Portfolio Management	2	3	Standardize PMO skill sets, increase project management training, span ePMO across DTMB, improve governance
Business Intelligence and Performance Management	2	4	Centralize data management across the enterprise, implement Master Data Management
Enterprise Architecture	2	4	Make EA report into the CIO, link EA to solution architects, reinstitute EA steering committee, increase EA training
Infrastructure and Operations	3	4	Eliminate overlaps in functional/duplicate roles, re-evaluate use of contractors, assign IT service product manager
IT Sourcing	3	4	Align purchasing and procurement functions organizationally
IT Vendor Management	2	4	Establish vendor and contract management functions
Security and Risk Management	2.5	4	Institute training program, build career paths and incentives to retain provide opportunities for specialization.

1 — Ad Hoc

2 — Reactive

3 — Challenged

4 — Managed

5 — Optimized

○ Aggregate

Analyze Phase

Process Key Findings

Analyze Phase

TOPSS Maturity Model: Process

1 — Ad Hoc	2 — Reactive	3 — Challenged	4 — Managed	5 — Optimized
<p>Processes to support the IT role are non-existent, or ad hoc. Common attributes, where applicable to the IT role, include:</p> <ul style="list-style-type: none"> ■ Completely ad hoc processes that are not documented, standardized, measured or continuously improved; ■ "Reinvention of the wheel," duplicative efforts. 	<p>Processes to support the IT role are largely documented, but with limited standardization, and are inconsistent from location to location, business unit to business unit. Common attributes, where applicable to the IT role, include:</p> <ul style="list-style-type: none"> ■ Processes are neither well defined nor repeatable; ■ Some or most processes documented; ■ Processes are not standardized or measured, and there is no method for improvement. 	<p>Processes to support the IT role are standardized and are consistently applied to the organization. Common attributes include:</p> <ul style="list-style-type: none"> ■ Some processes and procedures may be manual or inefficient, and workarounds are present; ■ No measurement or means of improving those processes. 	<p>Processes to support the IT role are well defined and managed consistently across the enterprise. Common attributes, where applicable to the IT role, include:</p> <ul style="list-style-type: none"> ■ Systems, methods and practices are followed with appropriate control and governance; ■ Mechanisms are in place across the enterprise to ensure compliance. 	<p>Processes to support the IT role are mature and efficient. Common attributes, where applicable to the IT role, include:</p> <ul style="list-style-type: none"> ■ Processes, methods and supporting systems are integrated; ■ Control/governance mechanisms are in place to feed a cycle of continual enhancement and evolution across the enterprise.

Analyze Phase

Process Key Findings



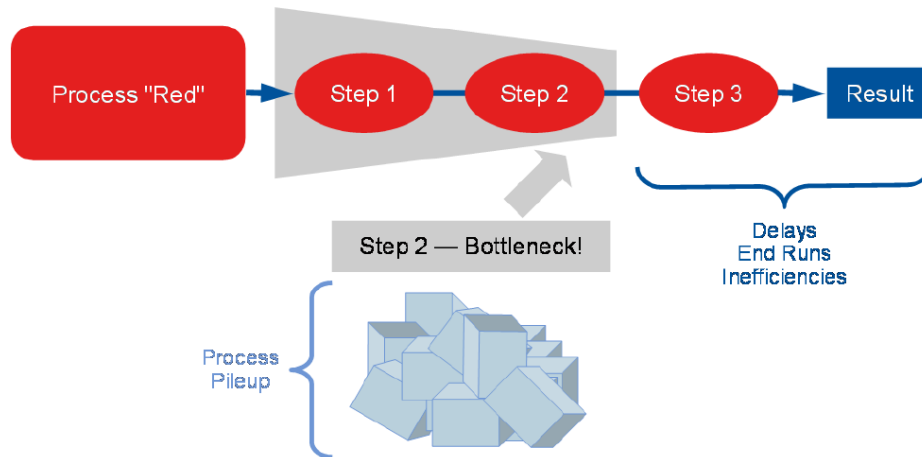
- From a process perspective, some key processes exhibited effective results while others were ripe for improvement and automation.
- Of particular note was the need to align business case analysis and benefits realization tracking with project and service execution to improve IT financial management.
- The above, and the Call for Projects process, should be re-engineered to better segment and track budgeting and portfolio management processes.
- Furthermore, accountability and execution of services could benefit from additional rigor and operational level agreements between DTMB functions to ensure high-quality service delivery and customer satisfaction.
- Moving solution design and involvement of enterprise architecture “upstream” in the process will result in more widely used solutions and better alignment with customers.
- Procurement processes exhibited immature elements that can be addressed to improve the overall function.
- Vendor management and coordination with PPM and ePMO tracking is another area that can be improved.

Analyze Phase

Process Key Findings Rationale: Process Impacts of a Siloed Organization

Optimizing assets means consolidation of resources around skills, functions or platforms — what we refer to today as silos.

Figure 2. Silo Dysfunction



Source: Gartner (June 2011)

■ Examples of silos at DTMB:

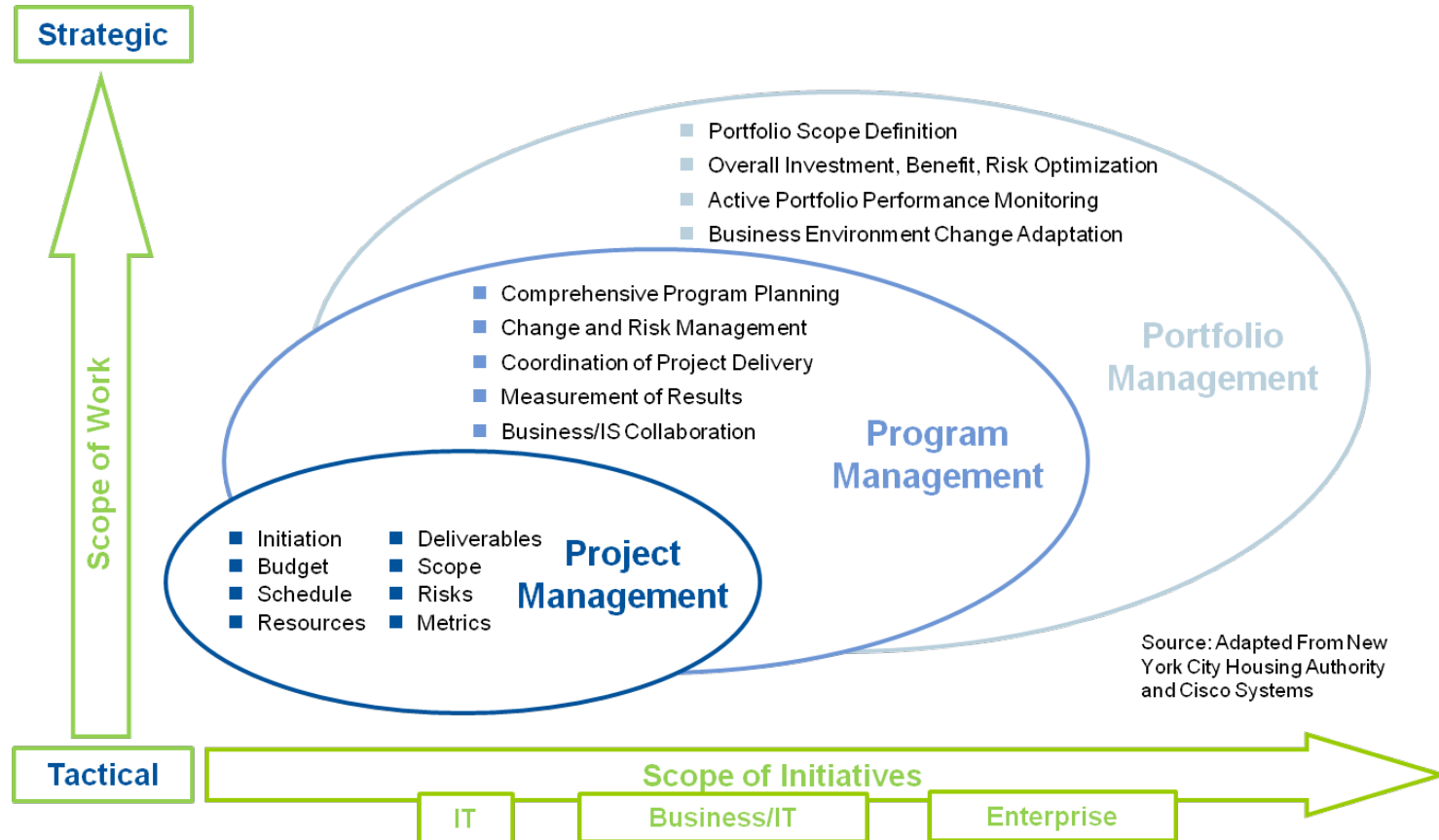
- The various Agency Services (including PMOs) personnel aligned by agency under a CSD (and IO)
- Shared Solutions
- Enterprise Architecture
- Help Desk
- Telecom
- MPSCS
- Finance
- Information Security
- Infrastructure PMO

Opportunity Costs of Silos

- Silos cause deep specialization.
- Specialization is myopic and the assets are focused on specific, repetitive tasks.
- As a given asset ages, additional resources emerge to deal with new or changing conditions, but the foundation asset is managed in the same way.
- This breeds individually optimized, expert organizations, but none has end-to-end understanding of or accountability for results.

Analyze Phase

Process Key Findings Rationale: Portfolio Management

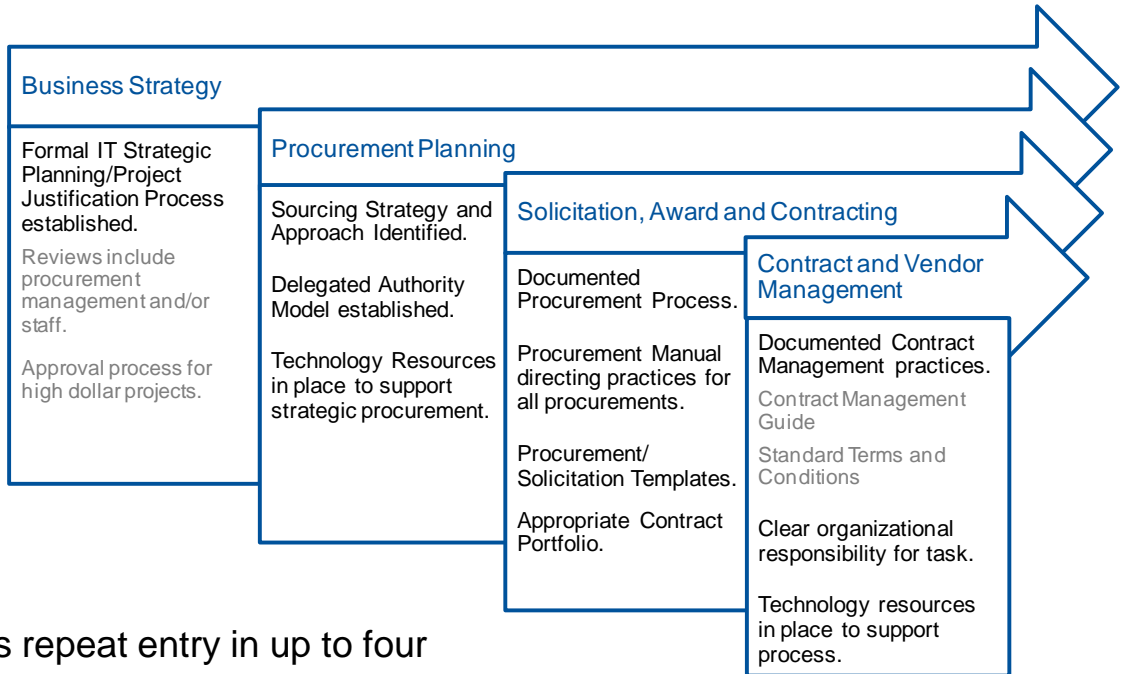


While DTMB is currently focused on project management, strategically the focus should expand to include program and portfolio management.

Analyze Phase

Process Key Findings Rationale: Procurement and Vendor Management

- The State segments purchasing and sourcing functions under separate management, and describes functions in a way that is inconsistent and in conflict with best practices.
- The sourcing function lacks meaningful integration in the strategic/project planning process and preparation for agency-specific sourcing efforts.
- The procurement process requires repeat entry in up to four separate systems prior to fulfillment.
- The workflow within systems, and the manual processes that connect them, lead to delays that are perceived to be related to the procurement process as opposed to other DTMB review processes.
- The State lacks contract management tools that allow for tracking of key contract terms, performance measures, key deliverable and renewal dates, etc.
- The State lacks meaningful capacity to generate spend analysis of its volume, and is highly dependent on vendors to provide this information.



Analyze Phase

Process Key Findings Rationale: Maturity, by IT Role

Current State = ○

Target State = ▲

IT Role	Current-State Maturity Rating	Future-State Maturity Rating	Key Actions to Close Gap
CIO: Business Alignment and Effectiveness	2	4	Implement benefits realization and business case analysis, align Agency and Infrastructure Services to customer needs
CIO: Operations Management	2	4	Improve service accountability, manage to project budgets, re-examine financial management processes
Applications	3	4	Report agency timeline and budget status, enforce SUITE for application development and support, improve QA capabilities
Program and Portfolio Management	2	3	Standardize project management processes, institute ePMO ROI review process, improve Call for Projects process
Business Intelligence and Performance Management	2	4	Formalize and standardize processes around data quality, data cleansing and master data management
Enterprise Architecture	2.5	4	Engage in business architecture, align EA discipline to standard industry EA methodology, update EA target state
Infrastructure and Operations	2.5	3	Create ITSM road map, implement integrated CMDB, automate processes for service request and fulfillment
IT Sourcing	3	4	Establish clear delegation of authority for agency-specific procurements
IT Vendor Management	1	4	Create contract/vendor management processes
Security and Risk Management	2	4	Conduct a comprehensive security risk assessment, maintain risk assessment process on a periodic basis, increase training

1 — Ad Hoc

2 — Reactive

3 — Challenged

4 — Managed

5 — Optimized



Aggregate



Analyze Phase

Strategy Key Findings

Analyze Phase

TOPSS Maturity Model: Strategy

1 — Ad Hoc	2 — Reactive	3 — Challenged	4 — Managed	5 — Optimized
<p>There is no defined strategy or strategic planning function. Common attributes, where applicable to the IT role, include:</p> <ul style="list-style-type: none"> ■ Operational process and/or technology investment decisions are made locally and independently as funding is made available; ■ The IT role does not have its own goals and objectives, and simply reacts to most-vocal or influential customers (either internal or external); ■ The IT role has no means of understanding whether or not it is aligned with DTMB's overall strategy. 	<p>Strategic planning occurs, but it is not coordinated, not clearly defined and does not have measurable objectives. Common attributes, where applicable to the IT role, include:</p> <ul style="list-style-type: none"> ■ Strategy does not fully integrate with the wider organization, nor is it communicated enterprise-wide. ■ The IT role has its own goals and objectives, but there is no real consideration for aligning it with the overall DTMB strategy, ■ Some means of understanding whether or not it is optimizing to its own desired goals, but cannot determine if it is really working toward DTMB's overall strategy. 	<p>The strategy is defined and communicated; however, it is not effectively translated into action. Common attributes, where applicable to the IT role, include:</p> <ul style="list-style-type: none"> ■ Governance is inadequately established, allowing for the implementation of the strategy to become fragmented and confused across the enterprise; ■ The IT role has its own goals and objectives that partially align with DTMB's overall strategy; ■ Reactively determines how well they are aligned to DTMB's overall IT Strategy; ■ Ineffective or nascent process and/or governance in place to ensure ongoing alignment with DTMB's overall strategy, or ability to take corrective action when it is getting out of alignment. 	<p>The strategy is clearly defined, communicated and socialized throughout the enterprise. Common attributes, where applicable to the IT role, include:</p> <ul style="list-style-type: none"> ■ An appropriate governance structure is in place to oversee and ensure the execution of the strategy; ■ The IT role has its own goals and objectives that fully align with DTMB's overall strategy; ■ Proactively determines how well they are aligned to DTMB's overall strategy; ■ Adequate process and/or governance in place to ensure ongoing alignment with DTMB's overall strategy, or to take corrective action when it is getting out of alignment. 	<p>Strategic planning is holistic, continually reviewed, and the strategy is updated to align with business objectives. Common attributes, where applicable to the IT role, include:</p> <ul style="list-style-type: none"> ■ Strategy is clearly defined and communicated throughout the enterprise; ■ Effective governance structure is in place to oversee the execution of the strategy; ■ The IT role has its own goals and objectives that fully align with DTMB's overall strategy; ■ Proactively determines how well they are aligned to DTMB's overall strategy; ■ Effective processes and/or governance in place to ensure ongoing alignment with DTMB's overall IT Strategy, and to take corrective action when it is getting out of alignment.

Analyze Phase

Strategy Key Findings

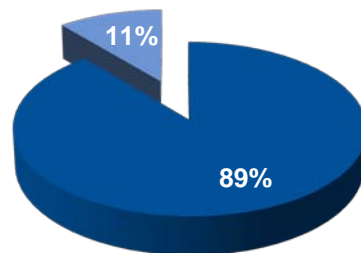


- From a strategy perspective, the fundamental change that will propel DTMB toward its goals is adapting from a reactionary organization to a proactive organization that invests in technology.
- To achieve the above, DTMB should seek IT investment funding streams in addition to customer-budgeted projects and services that allow for technology modernization, innovation and key infrastructure advancement opportunities.
- DTMB must also more closely align itself with customers at a strategic level to ensure that solutions and services provided are rendering positive impacts from a business perspective.
- Customer needs convey the need for an enterprise information strategy and master data management to more easily aggregate and share data for solutions, such as a one-stop citizen portal.
- Strategies for major investment and operational areas, such as data center, call center and customer mobility needs, should be developed in the near term to govern investment and tactical decisions in those areas.

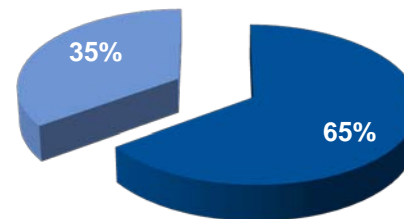
Analyze Phase

Strategy Key Findings Rationale: IT Budget Distribution

- Assessing IT capital expenses vs. operational expenses helps portray the investment profile for an organization in a given year, highlighting the balance between running the business and strategically investing in the future.
- Organizations with a higher capital spending may...
 - Be investing heavily in strategic IT infrastructure
 - Not have been managing asset investments well (i.e., “catching up”)
 - Simply have a more aggressive capitalization policy.
- The State of Michigan’s percentage of spending on capital expenses (11%) is far below peer averages (35%), which suggests a reactive spending approach and a potential for the inverse of the scenarios listed above.
- While operational spend is less than peers, it represents the significant majority of all IT spending in the State of Michigan.



■ SOM IT Operating Expenses
■ SOM IT Capital Expenses

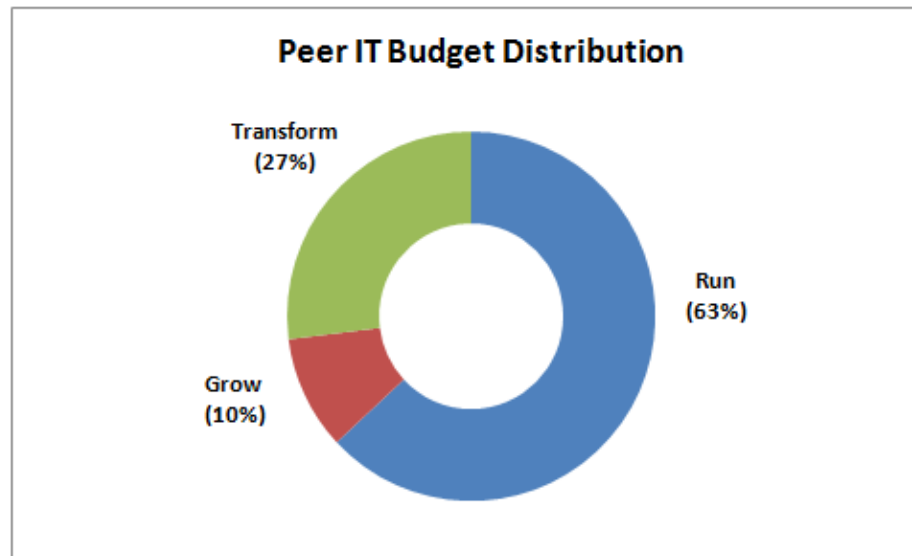


■ Peer IT Operating Expenses
■ Peer IT Capital Expenses

Analyze Phase

Strategy Key Findings Rationale: IT Budget Distribution (Cont'd)

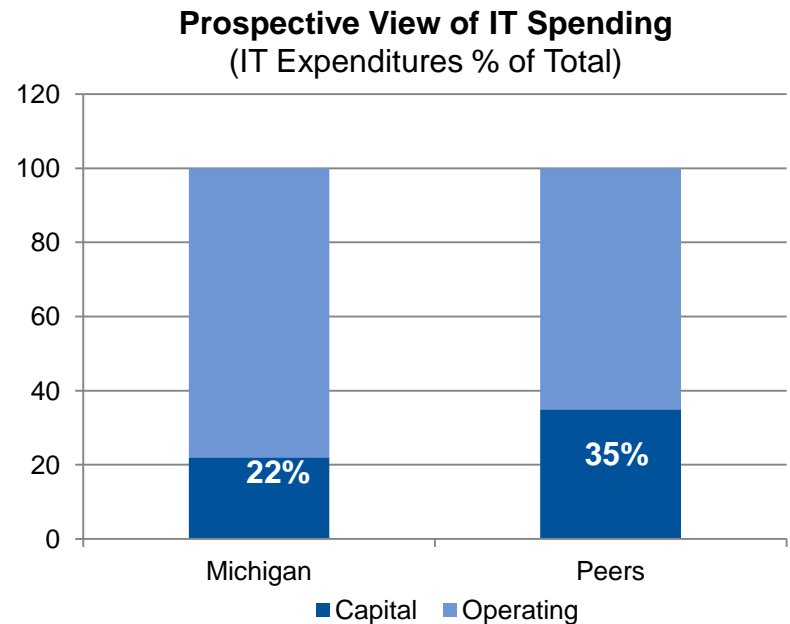
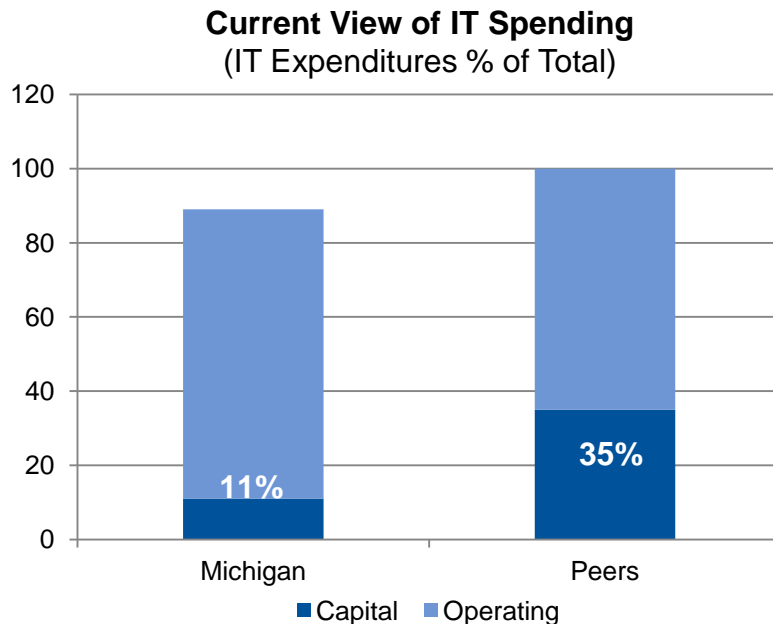
- In light of the State of Michigan's proportion of operational expenses, the data suggest that current spending patterns limit growth and transformative efforts. While peer organizations spend more than one-third of IT funds on growth and transformative investments, the State of Michigan has focused most of its spend on "keeping the lights on."
- Generally, high-"run" spending may indicate a limited strategic role for IT, while high-"grow" and "transform" spending might indicate IT has a stronger strategic role, where the focus should be on ROI. The graph below illustrates peer averages for IT budget distribution from a run/grow/transformation perspective.



Analyze Phase

Strategy Key Findings Rationale: Prospective View of IT Spending

- Additional spending in IT capital investments will bring the State's capital/operating spend ratio closer to peers, but overall spending would still be less than peer averages.



Prospective View Assumptions:

- IT spending increases by \$50M per year
- 90% of additional spending is allocated to capital projects or capital expense items
- Percentage of operating expenses could be reduced if:
 - Existing expense items are converted to capital expense items
 - Overall application maintenance costs are reduced

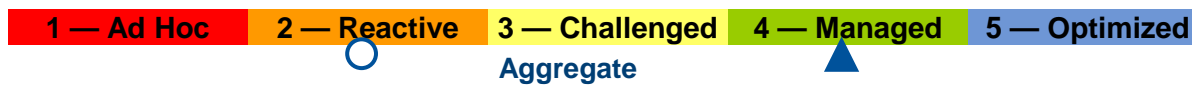
Analyze Phase

Strategy Key Findings Rationale: Maturity, by IT Role

Current State = ○

Target State = ▲

IT Role	Current-State Maturity Rating	Future-State Maturity Rating	Key Actions to Close Gap
CIO: Business Alignment and Effectiveness	2	4	Work with agency customers at strategic level, position DTMB as strategic partner with local governments
CIO: Operations Management	2	4	Focus on business strategy, create annual operational plans, prepare service definitions that communicate business value
Applications	2	4	Revamp budgeting processes to focus more on agency strategies, expand Application Portfolio Management
Program and Portfolio Management	2	3	Focus Call for Projects process on enterprise portfolio management
Business Intelligence and Performance Management	2	4	Develop Enterprise Information Management strategy, develop cross-agency Business Intelligence strategy
Enterprise Architecture	2	3	Refine the vision and scope of EA, develop EA principles for making decisions that improve business-IT alignment.
Infrastructure and Operations	2	3	Implement formal IT operations steering committee, re-evaluate cloud service offering, revisit data center strategy
IT Sourcing	2	4	Assess strategy for improving spend assessment, establish a representative basket of goods for peer price comparisons, determine proactive re-compete schedule
IT Vendor Management	1	4	
Security and Risk Management	3	4	Build a process to review and update policies on a regular basis, integrate with asset management



Analyze Phase

Service Level Key Findings

Analyze Phase

TOPSS Maturity Model: Service Level

1 — Ad Hoc	2 — Reactive	3 — Challenged	4 — Managed	5 — Optimized
<p>IT support services not clearly defined or negotiated with the customer. Common attributes, where applicable to the IT role, include:</p> <ul style="list-style-type: none"> ■ No service-level agreements or metrics for which they are accountable to either end customers or other groups within DTMB; ■ No means of working with customers on an ongoing basis to understand actual delivery against service-level agreements; ■ No means of continuously improving to achieve better levels of customer satisfaction. 	<p>IT support services are provided, but performance is not effectively measured. Common attributes, where applicable to the IT role, include:</p> <ul style="list-style-type: none"> ■ No or few objectives or metrics are defined for specific services, or across the enterprise; ■ Has service-level agreements and metrics for which they are accountable to either end customers or other groups within DTMB; ■ Ability to accurately calculate those metrics is limited; ■ Little means of working with customers on an ongoing basis to understand actual delivery against service-level agreements; ■ No means to continuously improve customer satisfaction. 	<p>Service-level agreements and metrics are established and the organization is accountable to end customers and other groups within DTMB. Common attributes, where applicable to the IT role, include:</p> <ul style="list-style-type: none"> ■ Ability to accurately calculate metrics that end customers and other DTMB groups partially believe to be accurate; ■ IT role is partially able to work with customers on an ongoing basis to understand actual delivery against service-level agreements; ■ No means of continuously improving to achieve better levels of customer satisfaction. 	<p>Service-level agreements and metrics are established, and the IT support organization is managing to agreed upon service level. Common attributes, where applicable to the IT role, include:</p> <ul style="list-style-type: none"> ■ Service-level agreements and metrics for which they are accountable to end customers and other groups within DTMB, benchmarked against peers; ■ Ability to accurately calculate metrics that end customers mostly believe to be accurate; ■ Fully able to work with customers on an ongoing basis to understand actual delivery against service-level agreements; ■ Ability to work toward improving actual delivery to current service-level agreements, but not toward increasing those service levels in the future. 	<p>Service-level agreements and metrics are collaboratively and regularly agreed to with customers, and organization is fully accountable to end customers and other groups within DTMB.</p> <ul style="list-style-type: none"> ■ Ability to accurately calculate metrics that end customers and other DTMB groups truly believe to be accurate; ■ Fully able to work with customers on an ongoing basis to understand actual delivery against service-level agreements; ■ Means of continuously improving to achieve better levels of customer satisfaction and to increase service; ■ Service levels support chargeback and other financial allocation mechanisms to deliver cost-effective and high-quality services.

Analyze Phase

Service Levels Key Findings

Service Levels



CIO: Business Alignment and Effectiveness

CIO: Operations Management

Applications

Program and Portfolio Management

Business Intelligence and Performance Management

Enterprise Architecture

Infrastructure and Operations

IT Sourcing and Vendor Management

Security and Risk Management

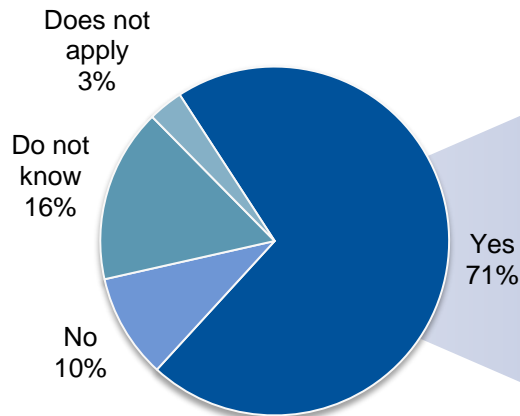
- From a service level perspective, DTMB must develop a comprehensive service catalog with meaningful service-level agreements, and improved invoicing and customer usage reporting methods.
- Improve progress and benefits realization reporting for projects as well as service delivery, and aim to complete execution of dashboards that convey DTMB performance for each customer.
- Implement operational level agreements to increase internal tracking and accountability of service delivery to meet customer SLAs.
- Define business intelligence SLAs for availability and performance of the end-user tools, as well as SLAs for data quality and master data standardization.
- Establish enterprise architecture SLAs for customers to ensure measurable outcomes, add performance cost and quality metrics.
- For procurement activities, set up a base schedule of events, milestones, go/no-go decision points and establish procurement, contract and vendor management performance metrics.

Analyze Phase

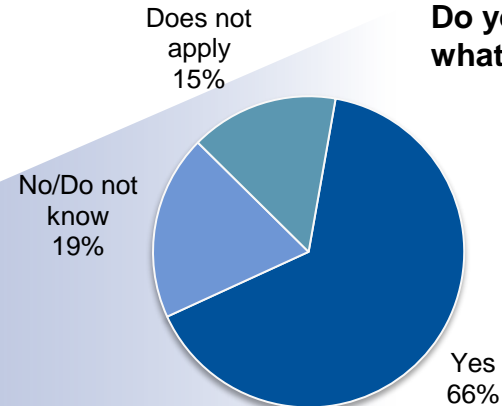
Service Levels Key Findings Rationale: ITBE Survey Results

- Based on the ITBE survey, less than 10% of customers felt current service-level agreements met their needs.

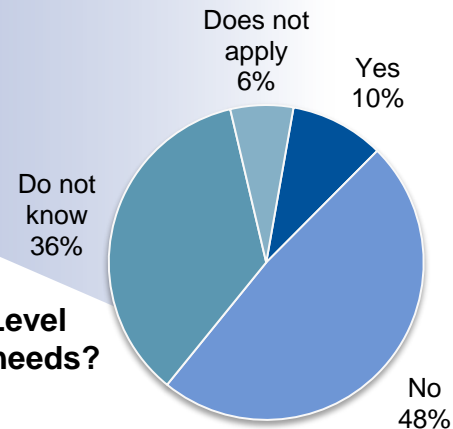
Has your organization established/determined Service-Level Agreements with IS?



Do you know what they are?



Do the current Service-Level Agreements meet your needs?



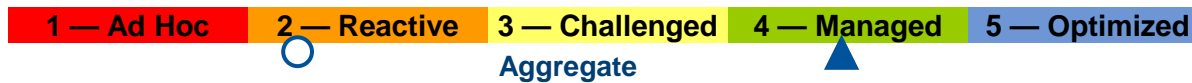
Analyze Phase

Service Levels Key Findings Rationale: Maturity, by IT Role

Current State = ○

Target State = ▲

IT Role	Current-State Maturity Rating	Future-State Maturity Rating	Key Actions to Close Gap
CIO: Business Alignment and Effectiveness	3	4	Develop detailed service catalog, standardized, complete SLAs with meaningful metrics, improved billing practices
CIO: Operations Management	1	4	Establish performance management instrumentation to monitor and measure progress, develop status metrics
Applications	2	4	More-consistent execution of projects, with improved on-time and on-budget reporting of project status, and dashboards
Program and Portfolio Management	2	3	Implement enterprisewide reporting on projects and related metrics, track ROI, improve communication of performance
Business Intelligence and Performance Management	2	4	Define SLAs for availability and performance of the end-user tools, as well as data quality and master data standardization
Enterprise Architecture	2	3	Establish EA SLAs to ensure measurable outcomes, add performance cost and quality metrics
Infrastructure and Operations	2	3	Develop metrics measurement and reporting that are useful for customers, utilize OLAs for internal management
IT Sourcing	1	3	Set up base schedule of events, milestones, go/no-go decision points, establish procurement performance levels
IT Vendor Management	1	4	Define contract and vendor management performance metrics
Security and Risk Management	2	4	Build SLAs for internal and management-level activities that provide operational- as well as management-level insight



Strategize Phase

Gartner Approach

Strategize Phase

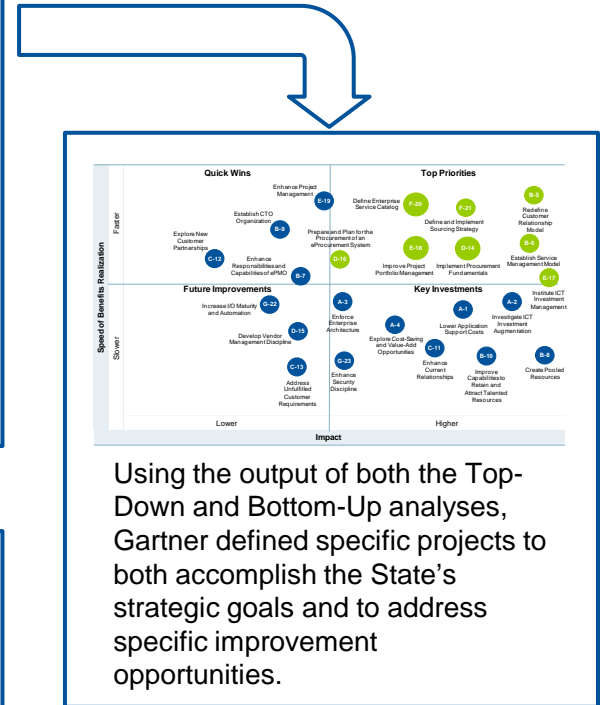
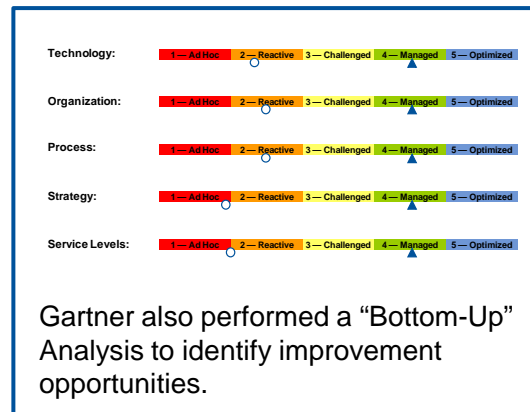
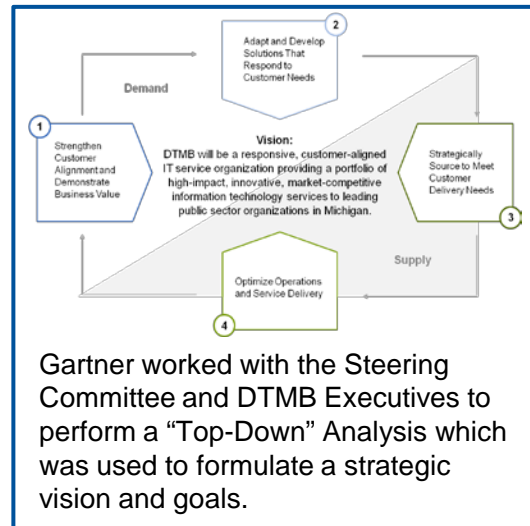
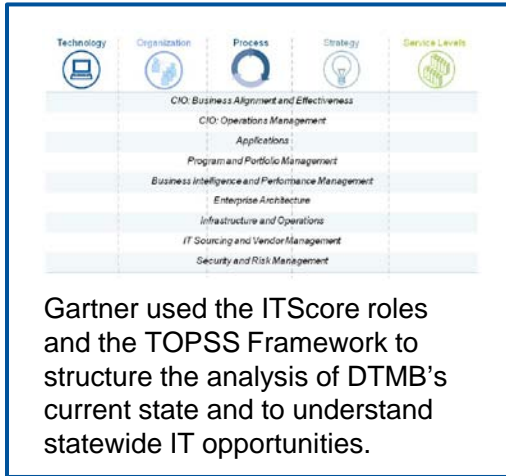
Gartner Approach — Strategize Phase

- Using the input and findings from the Analyze Phase, Gartner then embarked on the Strategize Phase, which focuses on the recommendations, road map and overall action plan that the State should follow to achieve its target maturity state and achieve its strategic goals and vision.

Plan	Analyze				Strategize		
	Major Tasks						
Project Plan and Management	Baseline Assessment	State Business Needs	Business, Services and Technology Opportunities	Maturity and Gap Analysis	Recommend	Road Map	Final Report
	Key Activities						
<ul style="list-style-type: none"> ■ Project Planning and Orientation ■ Project Kickoff ■ Data Collection Planning and Tools Overview ■ Finalize Project Work Plan ■ Finalize Project Communication and Administrative Activities 	<ul style="list-style-type: none"> ■ Initiate data-collection instruments (surveys, BM templates, documents) ■ Conduct business and IT interviews ■ Understand MI ICT's vision, and service and operating models ■ Document Current State Environment Report 	<ul style="list-style-type: none"> ■ Review current and future ICT needs and priorities based on current state evaluation and analysis of ICT strategies and IT leaders' future vision ■ Aggregate and summarize business and technology interviews into business needs ■ Develop State Business Needs Report 	<ul style="list-style-type: none"> ■ Define viable business, services and technology improvement scenarios ■ Identify potential risks and mitigation strategies ■ Analyze improvement scenarios against MI requirements to determine viability ■ Identify shared-services opportunities 	<ul style="list-style-type: none"> ■ Integrate comprehensive analysis and assessments ■ Evaluate IT capabilities against peers utilizing benchmarking analysis for Technology, People and Processes, and Capabilities ■ Evaluate IT capabilities to meet State business direction, vision and goals 	<ul style="list-style-type: none"> ■ Develop Business Model and Technology Solutions recommendations ■ Expand recommendations and provide additional detail and due diligence ■ Review recommendations with Governor's office, DTMB and IT advisors 	<ul style="list-style-type: none"> ■ Develop implementation strategy and plan 	<ul style="list-style-type: none"> ■ Develop Final Report ■ Develop Recommendations Summary Presentation ■ Develop Communications Plan ■ Develop Change Management Plan ■ Conduct Executive Presentation
	Deliverables						
<ul style="list-style-type: none"> ■ Final Project Plan ■ Status Reports (ongoing) 	<ul style="list-style-type: none"> ■ Deliverable A — Evaluation of Current State Environment ■ Deliverable B — Evaluation of the State's Business Needs ■ Deliverable C — Identification of Business, Services and Technology Opportunities ■ Deliverable D — Maturity and Gap Analysis 				<ul style="list-style-type: none"> ■ Deliverable E — Recommendations for Business Model Alternatives ■ Deliverable F — Road Map to Implementation ■ Deliverable G — Final Report and Executive Presentation 		
	How well does DTMB currently operate?	Which current and future needs must DTMB address?	Which opportunities can DTMB capitalize on?	Which gaps and areas of improvement can DTMB address?	Which investments and activities does Gartner recommend?	How does the State implement the recommendations?	How do we best communicate the plan for action to stakeholders?

Strategize Phase

Gartner Approach: Using the Analysis and Recommendations to Define Projects



Strategize Phase

Gartner Approach: Grouping Projects into Programs

- Projects were grouped into programs to provide the State with actionable sets of activities that meet recommendation requirements.
- Within each program, projects were sequenced based on priority, dependencies and available resources.
- Each program will have an owner accountable for the successful execution, and the seven programs will be governed by a steering committee that will oversee the execution of the road map.

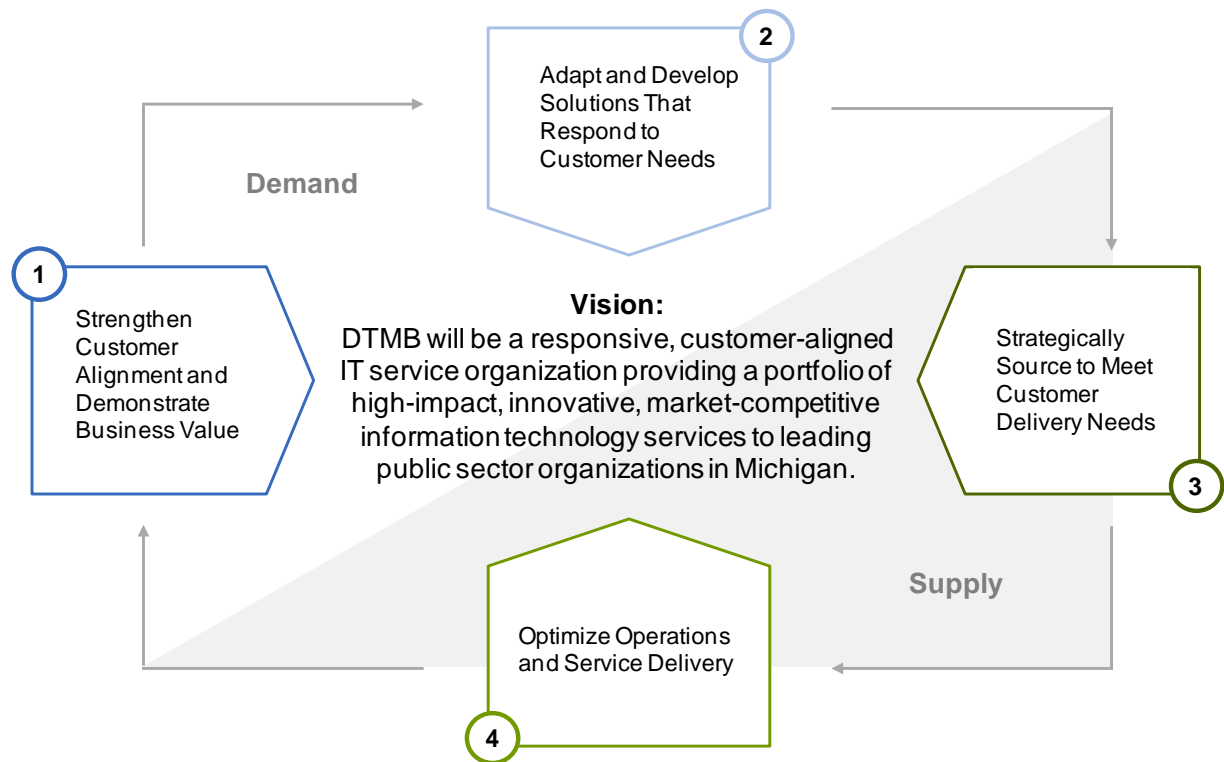
Strategize Phase

Strategic Goals and Recommendations

Strategize Phase

Top-Down Analysis: Four Fundamental Strategic Goals to Achieve the DTMB Future Vision

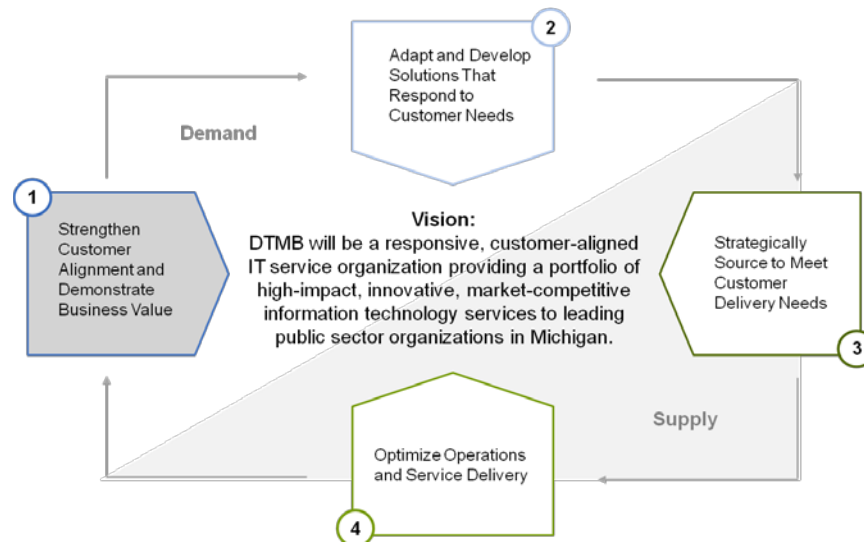
- Gartner worked with the State to define a Strategic Vision for DTMB and four strategic goals to realize that vision.
- For each of the four major goals, Gartner identified a series of recommendations crafted to guide DTMB toward the target state.
- Each recommendation is supported by a set of recommendation requirements which, in turn, map to specific actionable projects.
- As such, execution of all of the defined projects constitutes successful implementation of Gartner's recommendations



Strategize Phase

Top-Down Analysis: Goal 1 — Strengthen Customer Alignment and Demonstrate Business Value

- Of the four fundamental strategic goals, **the first two goals constitute the demand side** of service delivery that needs to be supplied by DTMB to achieve its vision. Managing and shaping this demand through effective service management is key to achieving DTMB's broader IT strategy.
- In order to achieve the stated vision, DTMB should adopt and implement a series of recommendations that “reset” the relationship with the customer base. This “reset” needs to rebuild the relationship from the ground up with the basic blocking and tackling of how services are defined and delivered to customers.

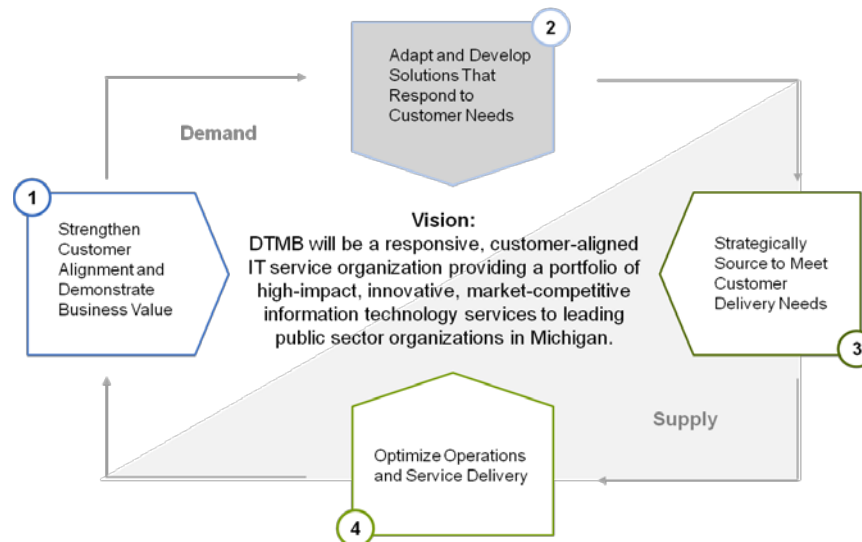


Goal 1. Strengthen Customer Alignment and Demonstrate Business Value	
Recommendation 1—1	■ Determine a Governance Model and Process to Allow for Accountability and Transparent Prioritization
Recommendation 1—2	■ Realize Opportunities to Expand Shared Services
Recommendation 1—3	■ Become a More Responsive and Customer-Aligned Organization

Strategize Phase

Top-Down Analysis: Goal 2 — Adapt and Develop Solutions That Respond to Customer Needs

- Complete and total alignment between what customers want in terms of services and value, and what DTMB provides in terms of solutions, is paramount. How the services are constructed from different components should be secondary to the understanding how those components are put together to deliver business value.



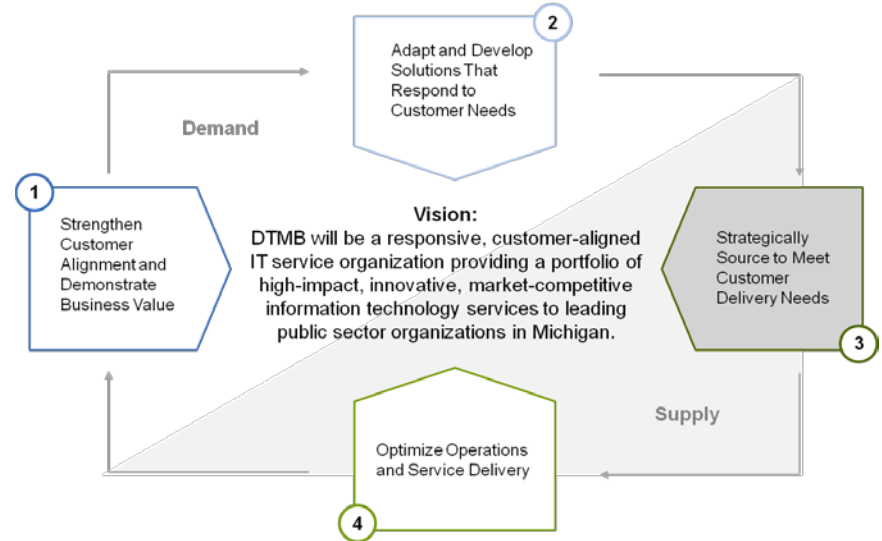
Goal 2. Adapt and Develop Solutions That Respond to Customer Needs

Recommendation 2—1	■ Redefine DTMB Services
Recommendation 2—2	■ Redefine DTMB Service Delivery Model
Recommendation 2—3	■ Deliver Solutions That Respond to Urgent Unfulfilled Customer Needs
Recommendation 2—4	■ Establish Foundation for Continued Innovation

Strategize Phase

Top-Down Analysis: Goal 3 — Strategically Source to Meet Customer Delivery Needs

- When customer demand has been understood and managed, DTMB must address how those demands will be supplied as efficiently and cost-effectively as possible. To that end, the **second two recommendations focus on the supply side** of service delivery.
- Once the services are redefined and an enhanced service model is in place, DTMB needs to have a predetermined method, procedure and decision rules for deciding the best supplier for each service. DTMB also needs to implement the procurement organization, processes and systems to truly support significant oversight of externally sourced services.



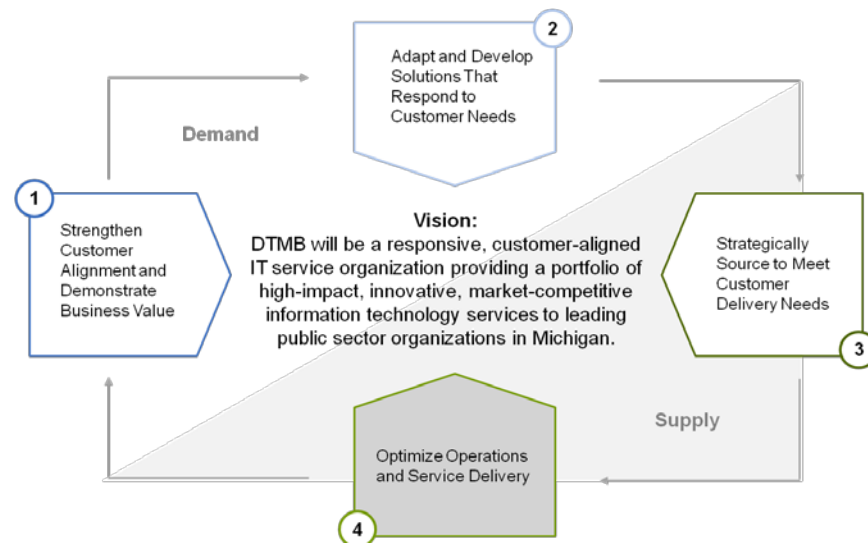
Goal 3. Strategically Source to Meet Customer Delivery Needs

- | | |
|---------------------------|---|
| Recommendation 3—1 | ■ Develop an Enterprise Sourcing Strategy |
| Recommendation 3—2 | ■ Improve Procurement and Vendor Management |

Strategize Phase

Top-Down Analysis: Goal 4 — Optimize Operations and Service Delivery

- Finally, for those services that are to be sourced internally, DTMB should implement a series of recommendations that lead to revamped, best-practice IT operations from both a functional and technical perspective. These recommendations are focused on doing the right things, as well as doing things right.



Goal 4. Optimize Operations and Service Delivery	
Recommendation 4—1	■ Enhance IT Investment and Financial Management
Recommendation 4—2	■ Improve Resource Management
Recommendation 4—3	■ Enhance Workforce and Talent Management Processes
Recommendation 4—4	■ Mature and Promote Portfolio and Project Management
Recommendation 4—5	■ Rationalize Application Portfolio
Recommendation 4—6	■ Continue to Optimize Infrastructure and Operations
Recommendation 4—7	■ Enhance Security of State Assets and Data

Strategize Phase

Top-Down Analysis: Synergy among Goals and Recommendations

- The synergistic relationships between the strategic goals, as well as their associated recommendations, tell a compelling story of how DTMB can improve to best serve its customers from a cradle-to-grave process perspective.
- By adapting the approach to customer service and definition of solutions and services, DTMB can improve its customer alignment and satisfaction. Through strategic sourcing and continuous improvement of its operations, it can deliver said solutions and services in a high-quality, cost-effective manner.
- The relationships and “flow” from Goals 1 through 4 are described below:
 - **Goal 1** recommendations center on organizational, process and outreach activities that will help DTMB transform into a strategic partner for its current and potential customer base, while also instituting governance and prioritization improvements that benefit the State as a whole.
 - **Goal 2** recommendations focus on mastering solution development and service delivery to adeptly respond to customer business needs. Through a revised delivery model, formalized innovation practices, and capitalizing on current untapped needs, the State can provide high-value services that better meet the strategic and tactical requirements gathered through **Goal 1**.
 - **Goal 3** recommendations strategically source the resources required to deliver the comprehensive and customer-oriented catalog of solutions and services borne via **Goal 2**. Through more timely, efficient and cost-effective sourcing practices, the State can yield better value and flexibility from its technology investments.
 - **Goal 4** recommendations hone in on value-added efficiency, consolidation and optimization activities that will enable DTMB to maximize its use and protection of technology assets and data. The continuous improvement objectives that comprise **Goal 4** underpin and fuel the efficacy of **Goals 1, 2 and 3**.

Strategize Phase

Developing Actionable Programs and Projects to Address Gaps and Opportunities

Strategize Phase

Bottom-Up Analysis — Gartner Defined and Prioritized Specific Projects

Project	Project Short Description	Project Owner	Top Priority	Quick Win	Future Improvement	Key investment
A-1	Lower Application Support Costs	Agency Services				✓
A-2	Investigate ICT Investment Augmentation	CIO				✓
A-3	Enforce Enterprise Architecture	CTO		✓		✓
A-4	Explore Cost-Saving and Value-Add Opportunities	Procurement				✓
B-5	Redefine Customer Relationship Model	CIO	✓	✓	✓	✓
B-6	Establish Service Management Model	Solutions Portfolio Manager	✓			✓
B-7	Enhance Responsibilities and Capabilities of ePMO	ePMO		✓		✓
B-8	Create Pooled Resources	Agency Services				✓
B-9	Establish CTO Organization	CTO		✓	✓	✓
B-10	Improve Capabilities to Retain and Attract Talented Resources	CIO				✓
C-11	Enhance Current Relationships	Agency Services				✓
C-12	Explore New Customer Partnerships	CTPSS		✓		

NOTE: Top Priority projects shown here in **bold blue** type.

Strategize Phase

Bottom-Up Analysis — Gartner Defined and Prioritized Specific Projects (Cont'd)

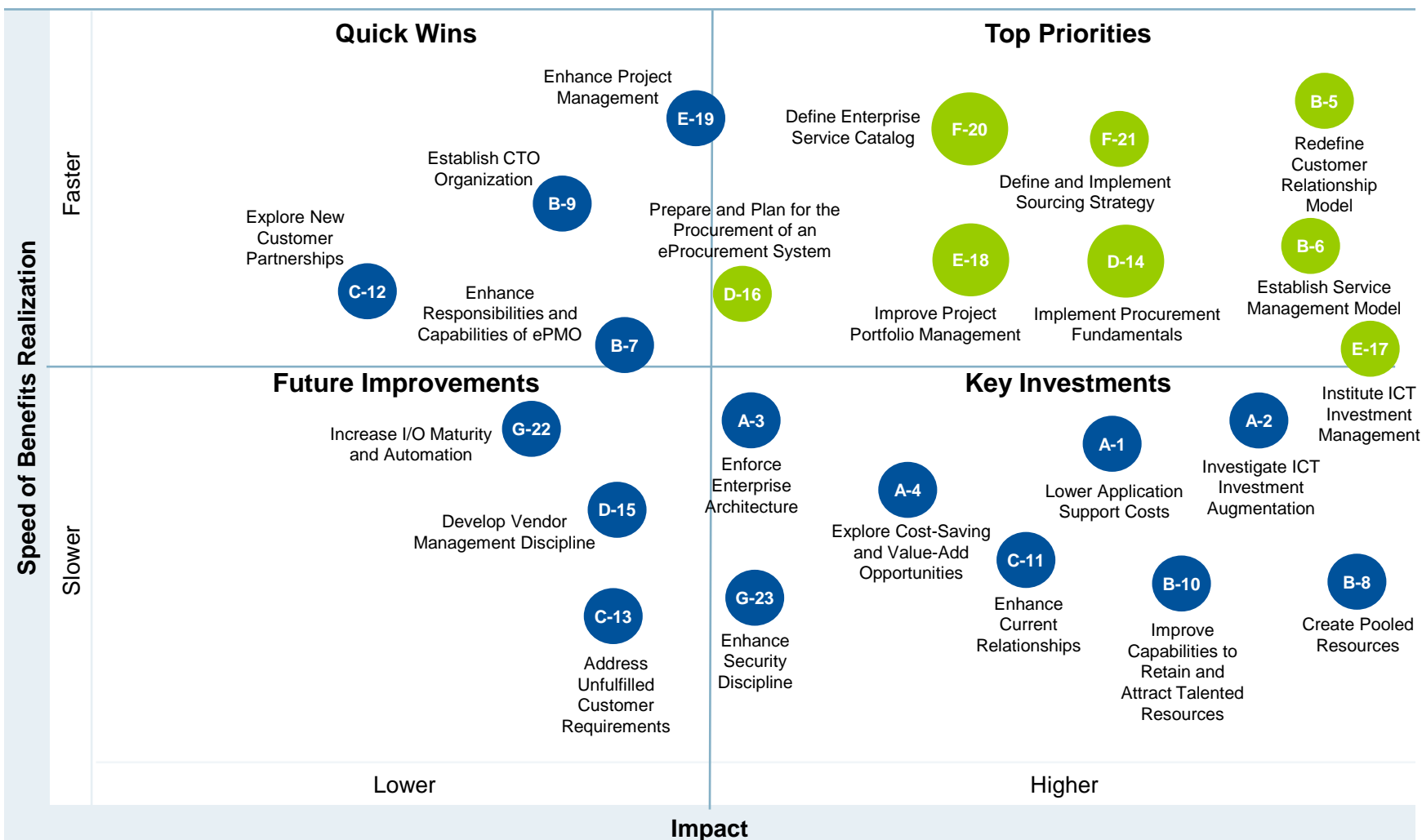
Project	Project Short Description	Project Owner	Top Priority	Quick Win	Future Improvement	Key investment
C-13	Address Unfulfilled Customer Requirements	Solutions Portfolio Manager		✓	✓	
D-14	Implement Procurement Fundamentals	Procurement	✓			✓
D-15	Develop Vendor Management Discipline	Procurement			✓	
D-16	Prepare and Plan for the Procurement of an eProcurement System	Procurement	✓			
E-17	Institute ICT Investment Management	CIO	✓			✓
E-18	Improve Project Portfolio Management	ePMO	✓			✓
E-19	Enhance Project Management	ePMO		✓		✓
F-20	Define Enterprise Service Catalog	Solutions Portfolio Manager	✓			
F-21	Define and Implement Sourcing Strategy	Procurement	✓			
G-22	Increase I/O Maturity and Automation	Infrastructure Services			✓	
G-23	Enhance Security Discipline	Office of Enterprise Security		✓	✓	✓

NOTE: Top Priority projects shown here in **bold blue** type.

Strategize Phase

Bottom-Up Analysis — Gartner Defined and Prioritized Specific Projects

Immediate-Focus Projects
(size relative to cost)



Strategize Phase

Bottom-Up Analysis — Gartner Mapped the Projects to the Opportunities

Speed of Benefits Realization	Impact	
	Lower	Higher
	Impact	
	Lower	Higher
Faster	Quick Wins	Top Priorities
	<ul style="list-style-type: none"> Position the IO as a Strategic Partner (B-5) Engage Local Governments (C-12) Clarify Services to Customer Agencies (F-18) Leverage the Tools DTMB Already Owns (D-14) Institutionalize Enterprisewide Reporting Tool (C-13) Realign EA to Report to an Executive-Level Function (B-9) Establish the Solution Architect Function (B-9) Reinforce SUITE Methodology (B-7; E-19) Standardize Project Status Reporting (E-19) Standardize Project Management Processes (E-19) Conduct a Comprehensive Risk Assessment (G-23) Improve Communications from EA to Stakeholders (A-3) Conduct Security Training (G-23) 	<ul style="list-style-type: none"> Address Agency Perception of DTMB's Business Value (F-20) Establish Business Analyst Function (B-5) Establish Agency ICT Strategic Planning Processes That Are Separate From the Call for Projects (E-17; E-18) Consolidate ICT Service Catalogs (B-6; F-20; F-21) Measure Customer Satisfaction (B-5) Improve Customer Metrics (B-5) Establish and Communicate Standard Procurement Process (D-14) Enable Procurement Automation (D-16)
Slower	Future Improvements	Key Investments
	<ul style="list-style-type: none"> Operationalize the Strategic Plan (B-5) Become More Business Architecture-Driven (B-9) Implement Predictive Analytics (C-13) Build Enterprise Information Management (EIM) Capability (C-13) Enhance Governance of Business Intelligence (BI)/Performance Management (PM) Activities (C-13) Standardize Data Management Processes (C-13) Continue to Innovate Enterprise Architecture (B-9) Address Vendor Risk (D-15) Increase Scope of Vulnerability Management (G-23) Incorporate Privacy Management (G-23) Implement Automated ICT Operational Tools (G-22) Improve ICT Process Maturity (G-22) 	<ul style="list-style-type: none"> Improve Customer Service Satisfaction (C-11) Establish Internal Governance (E-17; E-18) Strengthen Application Portfolio Management (A-1) Optimize Resources to Enable Resource Pooling Across DTMB (B-8) Align Organizational Reporting and Governance Structure (B-5 thru B-9) Enhance Financial Management (A-2; E-17) Increase Skill and Training for Project Management Roles (B-7; B-10; E-19) Enable Citizen-Centric Government (A-4) Align EA with Industry Best Practices (A-3) Increase Scope of EA Coverage (A-3) More Closely Align Purchasing and Procurement Functions (D-14) Improve Security Operations Center (SOC) Operations (G-23) Enhance Data Security (G-23)

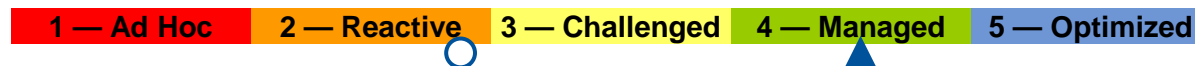
Strategize Phase

Bottom-Up Analysis — Addressing Gaps

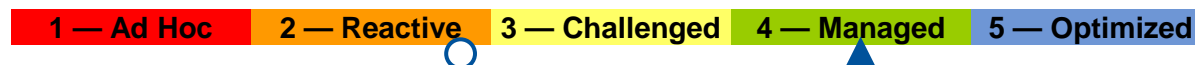
Current State = ○
Target State = ▲

- Overall, DTMB was rated as “Reactive” from a TOPSS perspective, which is supported by other quantitative findings such as the high ratio of operational vs. capital spending. In aggregate, the target maturity for DTMB is “Managed,” which will enable DTMB to achieve its strategic goals in an achievable, methodical fashion, and position DTMB for future maturation to an “Optimized” state.

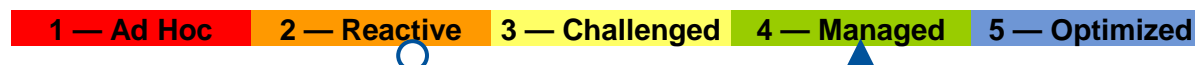
Technology:



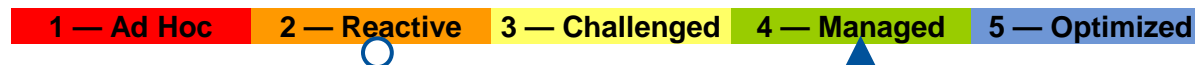
Organization:



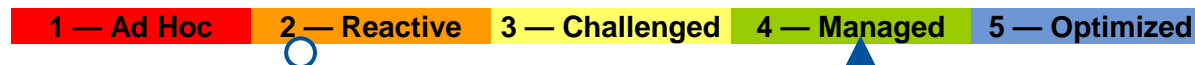
Process:



Strategy:




Service Levels:

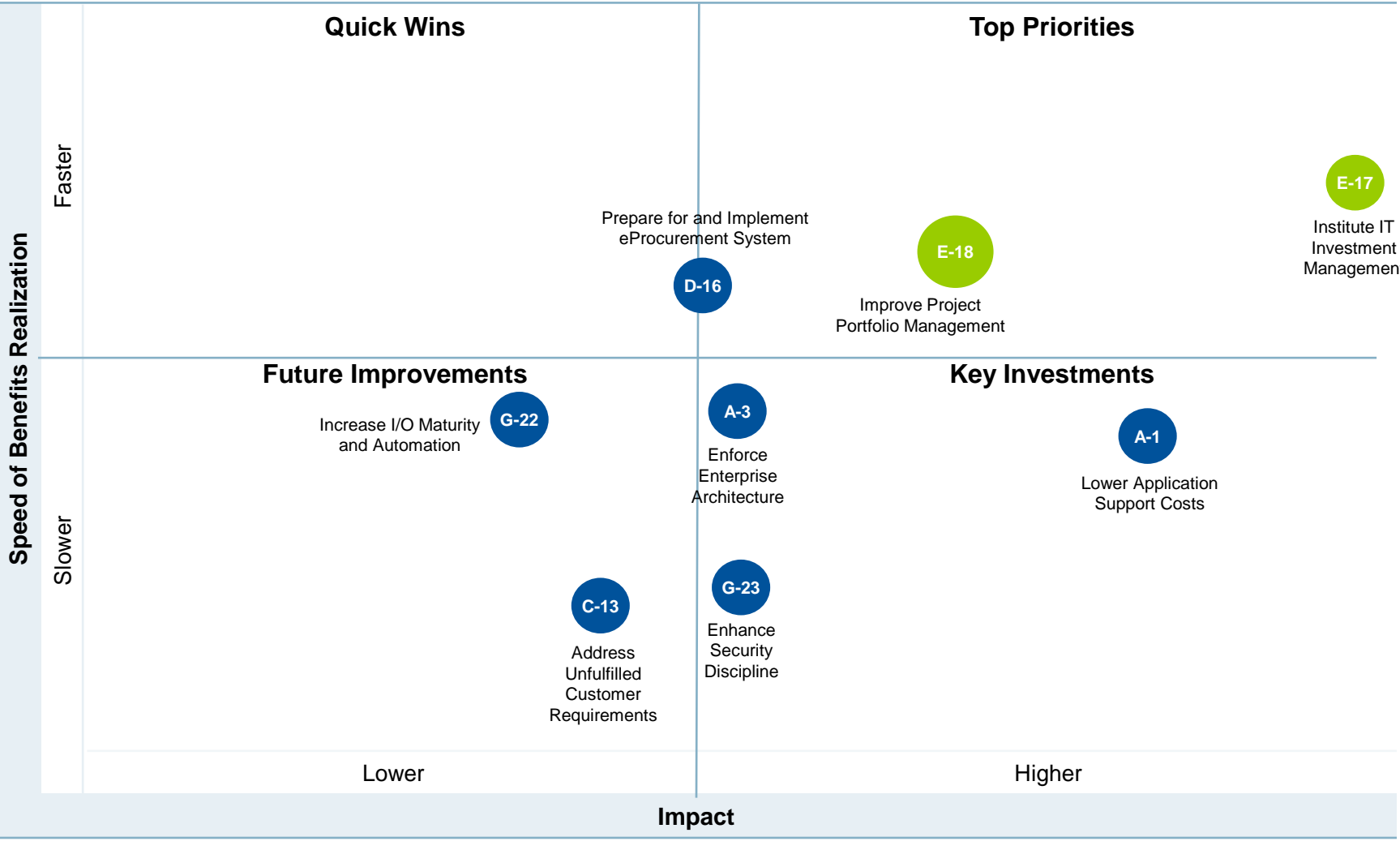


Strategize Phase

Bottom-Up Analysis — Addressing Gaps: Projects That Address Technology Maturity Gaps




Immediate-Focus Projects
(size relative to cost)

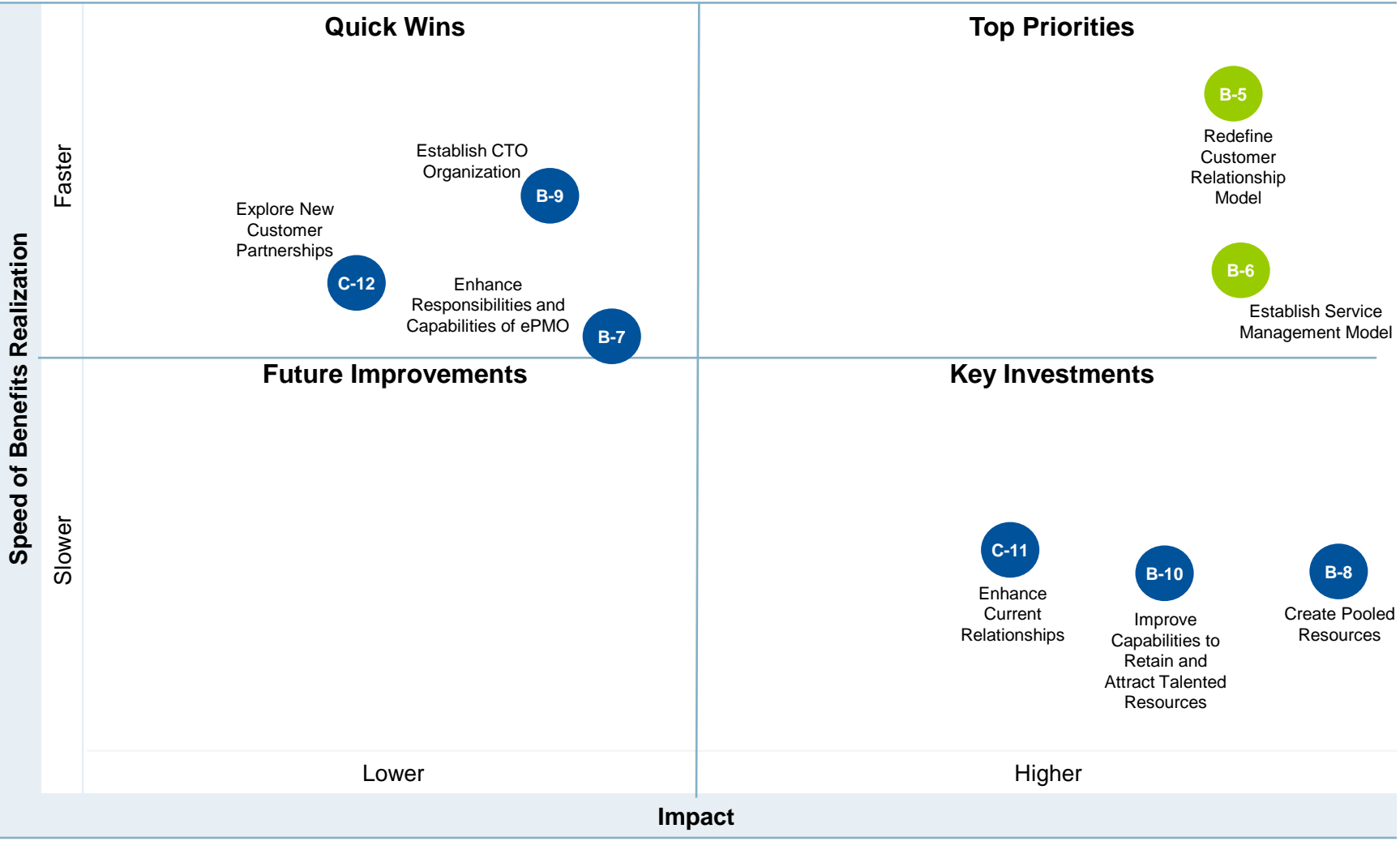


Strategize Phase

Bottom-Up Analysis — Addressing Gaps: Projects That Address Organizational Maturity Gaps



Immediate-Focus Projects
(size relative to cost)

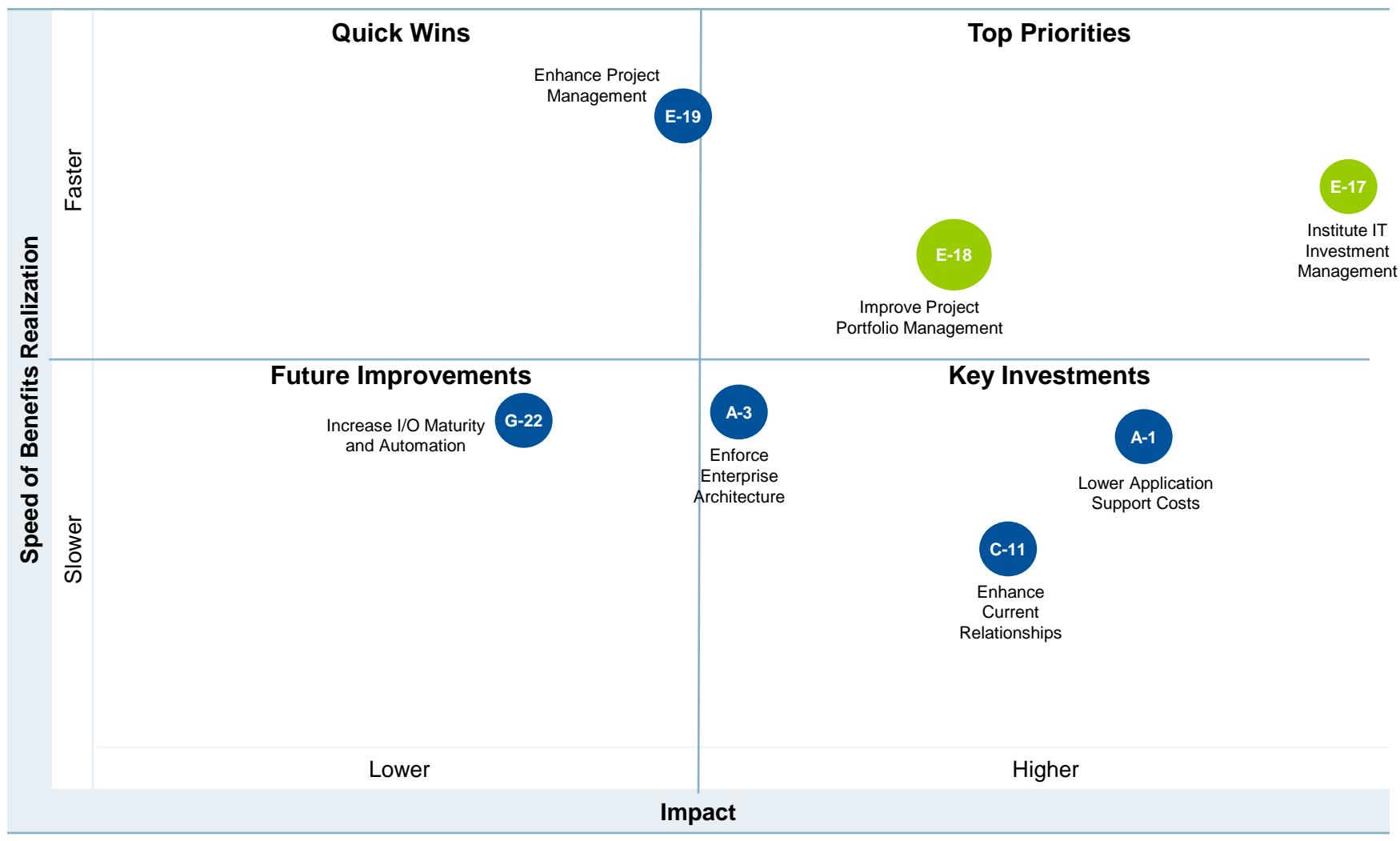


Strategize Phase

Bottom-Up Analysis — Addressing Gaps: Projects That Address Process Maturity Gaps



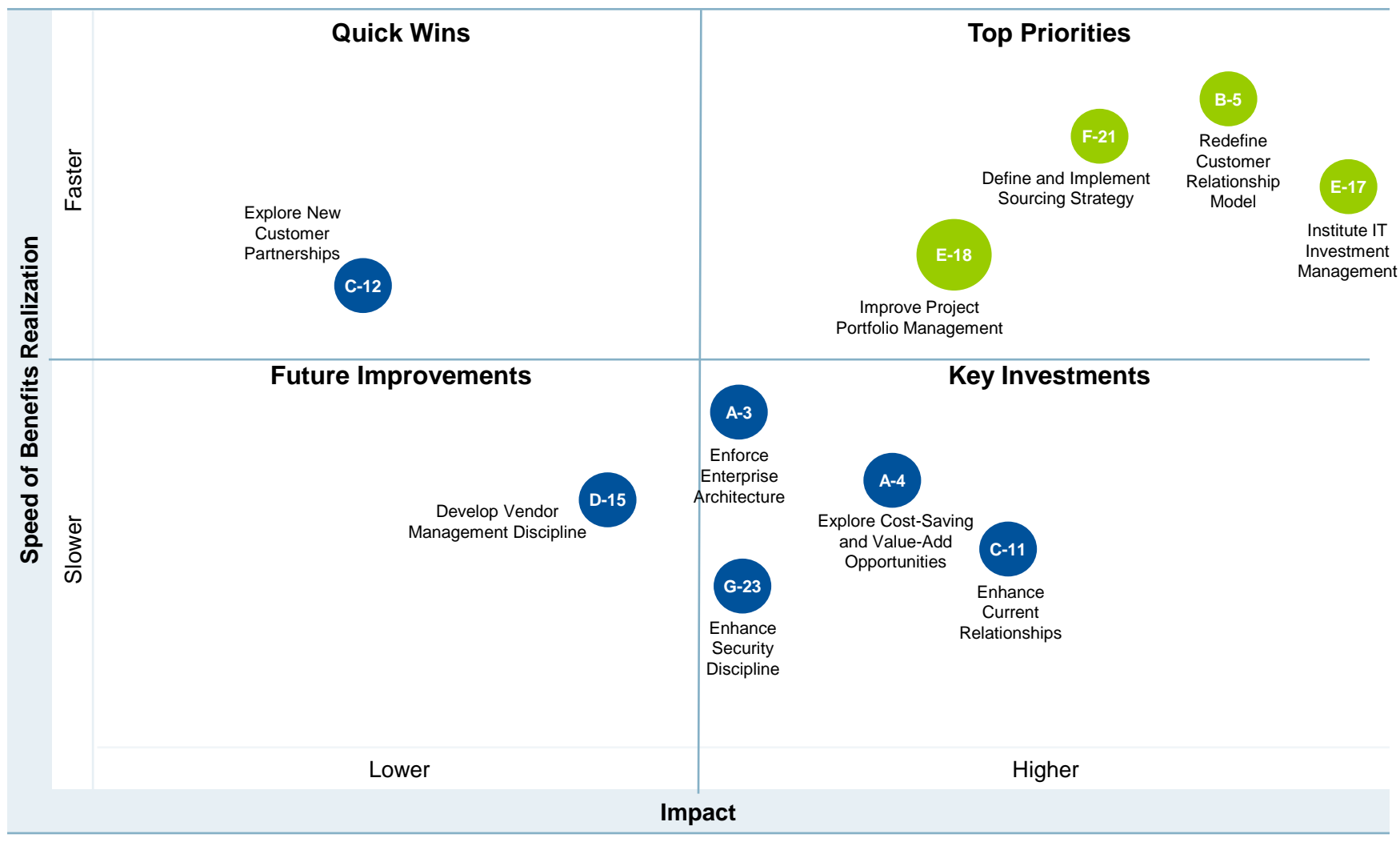
Immediate-Focus Projects
(size relative to cost)



Strategize Phase


Bottom-Up Analysis — Addressing Gaps: Projects That Address Strategy Maturity Gaps

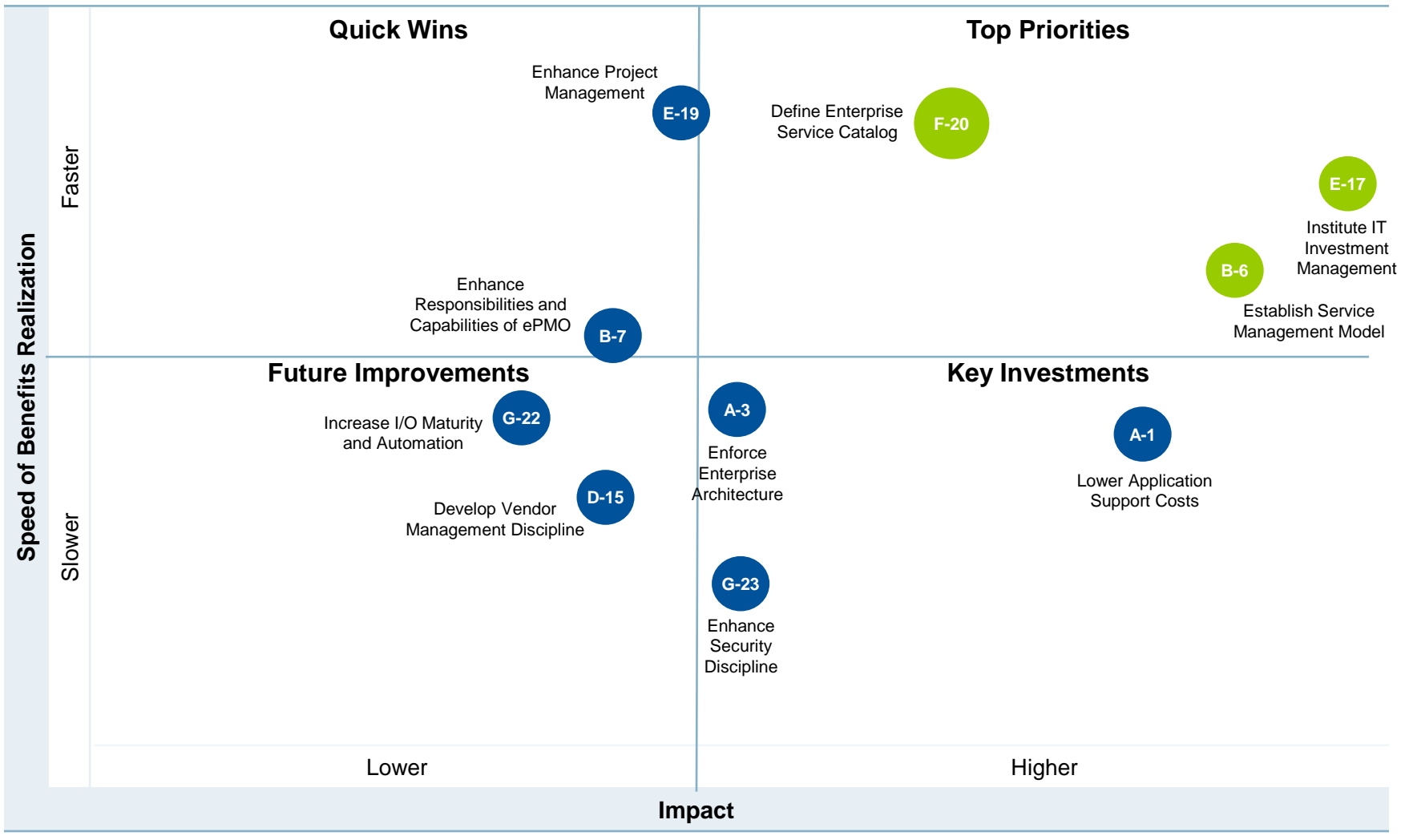
Immediate-Focus Projects
(size relative to cost)



Strategize Phase

Bottom-Up Analysis — Addressing Gaps: Projects That Address Service Levels Maturity Gaps

 Immediate-Focus Projects
(size relative to cost)



Strategize Phase

Road Map to Achieve Strategic Vision and Goals

Strategize Phase

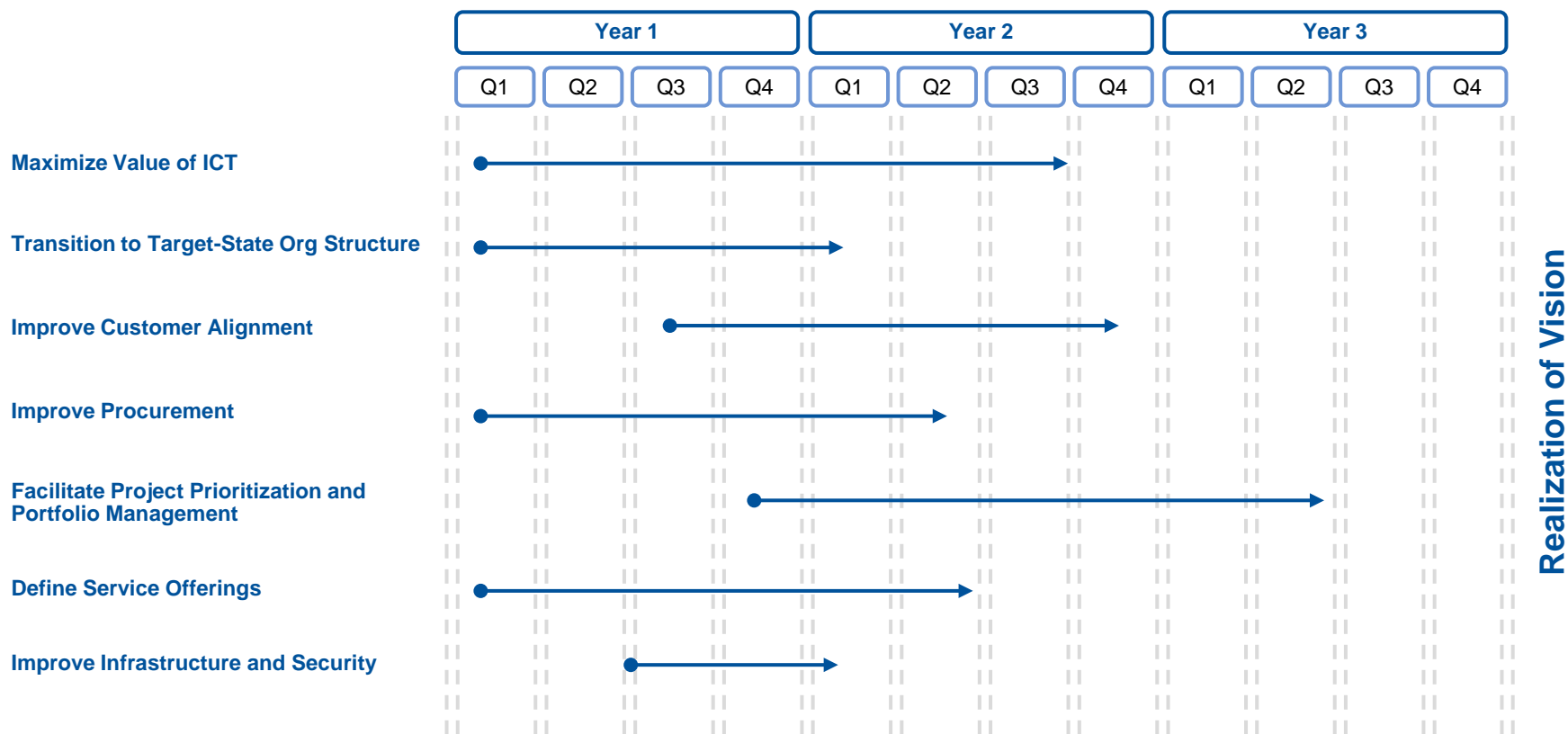
Grouping Projects into Programs

- Projects were grouped into programs to provide the State with actionable sets of activities that meet recommendation requirements.
- Each program will have an owner accountable for the successful execution, and the seven programs will be governed by a steering committee that will oversee the execution of the road map.
- The seven programs must be executed to achieve the four defined DTMB strategic goals and the overall DTMB vision. The programs are as follows:
 - A. Maximize Value of ICT
 - B. Transition to Target-State Organizational Structure
 - C. Improve Customer Alignment
 - D. Improve Procurement
 - E. Facilitate Project Prioritization and Portfolio Management
 - F. Define Service Offerings
 - G. Improve Infrastructure and Security.
- The highest-priority projects, shown in the Top Priorities quadrant and highlighted in green, are foundational in nature and must be executed from a critical-path standpoint in order for the State to be successful in achieving its goals.

Strategize Phase

Road Map and Program Overview

- The road map for executing the seven identified programs is presented below, followed by an overview of each of the programs, including costs, benefits, major deliverables and the program road map.



Strategize Phase

Road Map and Program Costs

- Collectively, the seven programs will drive DTMB toward realization of its vision, address maturity gaps, and help DTMB reach its target state. The required investments to execute the road map will yield significant benefits that will truly transform the State of Michigan.
- To execute the seven programs, the State will need to invest between **\$11M–\$16M** in internal and external resource costs. Internal costs refer to State employees, while external costs refer to contractors; this figure does not include any hardware or software costs, or downstream projects.
- DTMB should develop and consistently use total cost of ownership (TCO) and return on investment (ROI) models to quantify savings, avoidances and benefits. It is expected that TCO will decrease and ROI will increase as the road map is implemented.
- It should also be noted that the costs the near-term programs will require additional investments that will be estimated as part of the road map execution. This includes projects and initiatives such as:
 - Legacy Application Replacement
 - Citizen Portal Implementation
 - Data Center Sourcing
 - Call Center Optimization
 - Network/Broadband Enhancements
 - Resource Pooling
 - Mobility, and BI Solution Implementations
 - eProcurement Software and Implementation
 - I&O Automation and Security Improvement Tools.

Strategize Phase

Road Map and Program Benefits

- Once the strategic investments are made and the programs are rolled out, DTMB can expect to yield significant benefits, which are listed by program in the subsequent slides. The table below summarizes some of the chief benefits that DTMB will achieve through road map execution.

Chief Benefits Achieved Through Road Map Execution

- Defined Application Review Process and list of near-term replacement candidates ROI
- Sustained funding for IT transformation, increased value to customers
- Lower Total Cost of Ownership, ROI model to track benefits
- Improved alignment with customers and customer satisfaction
- New services that address business needs by customers
- Foundational architecture for statewide initiatives
- Improved resource allocation and staff capabilities
- Ability to coordinate all State IT projects and focus on business benefits
- Proactive development of innovative solutions to meet business needs
- Improved solution consistency across the enterprise and service delivery
- Standardized and automated processes and increased efficiency
- Economies of scale and improved enforcement for IT procurements
- Improved contracts, terms and conditions
- Vendor oversight to reduce contract risk and maximize value
- Aggregated, centralized view of contracts and renegotiation targets
- 24/7 capability of monitoring and responding to security threats

Strategize Phase

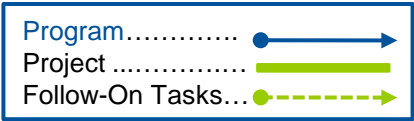
Program A: Maximize Value of ICT

- Program A is focused on increased investment in ICT, opportunities to reduce total cost of ownership, and methods to derive maximum value out of ICT data and assets.
- The potential of Program A to ultimately yield significant financial benefits is very high, but diligent alternatives and financial analysis are paramount in the short term to ensure that future investments provide the best value to the State. The projects that comprise Program A are as follows:
 - A-1: Lower Application Support Costs
 - A-2: Investigate ICT Investment Augmentation
 - A-3: Enforce Enterprise Architecture
 - A-4: Explore Cost-Saving and Value-Add Opportunities.
- The table below summarizes the estimated costs, benefits and major deliverables for the program.

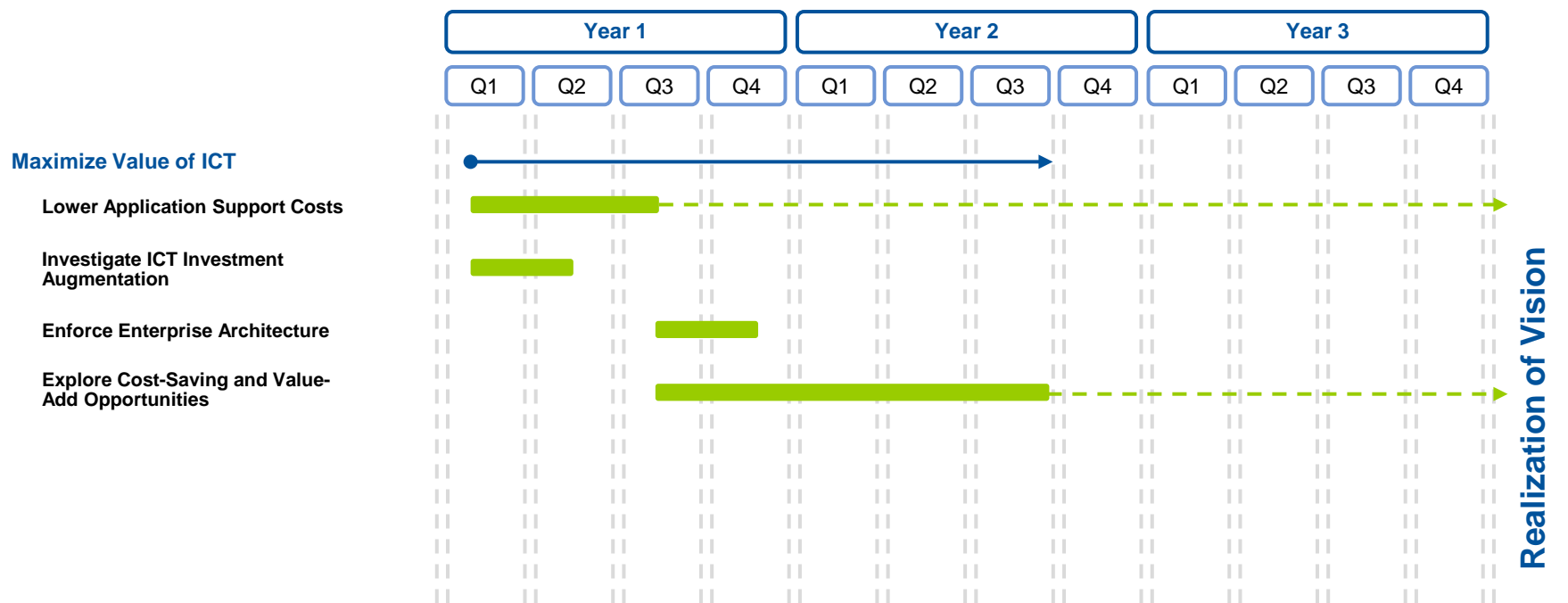
Cost Estimates	Chief Benefits	Major Deliverables
External Costs: \$975K–\$1.675M (est.) Internal Costs: \$809K–\$1.48M (est.) Potential Future Costs: <ul style="list-style-type: none">■ Application Replacement■ Citizen Portal Implementation■ Data Center Sourcing■ Call Center Optimization■ Network/Broadband Enhancements	<ul style="list-style-type: none">■ Defined Application Review Process and list of near-term replacement candidates with ROI■ Sustained funding for ICT transformation and increased value to customers■ ROI model to exhibit benefits and support decisions■ Lower Total Cost of Ownership■ Foundational architecture for statewide initiatives■ Innovation improvements	<ul style="list-style-type: none">■ Documented Application Portfolio Management (APM) Process and list of initial candidates for near-term replacement■ Business case for increased funding and short-, medium- and long-term investment plan■ Enterprise Architecture Future-State Road Map and Communication Plan■ Independent Cost-Saving and Value-Add Analyses

Strategize Phase

Program A: Maximize Value of ICT — Road Map



- DTMB should immediately begin Program A to rationalize its application portfolio, application tools and platforms to determine candidates for replacement. In addition, exploring opportunities for increased ICT investment should be pursued to realize its vision.



Strategize Phase

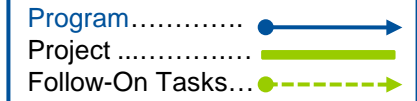
Program B: Transition to Target-State Organizational Structure

- Program B is focused on establishing an organizational structure that will improve customer alignment, service delivery, innovation, project portfolio management and resource allocation.
- The completion of Program B will facilitate the transition to the Target-State Functional Model. The projects that comprise Program B are as follows:
 - B-5: Redefine Customer Relationship Model
 - B-6: Establish Service Management Model
 - B-7: Enhance Responsibilities and Capabilities of ePMO
 - B-8: Create Pooled Resources
 - B-9: Establish CTO Organization
 - B-10: Improve Capabilities to Retain and Attract Talented Resources.
- The table below summarizes the estimated costs, benefits and major deliverables for the program.

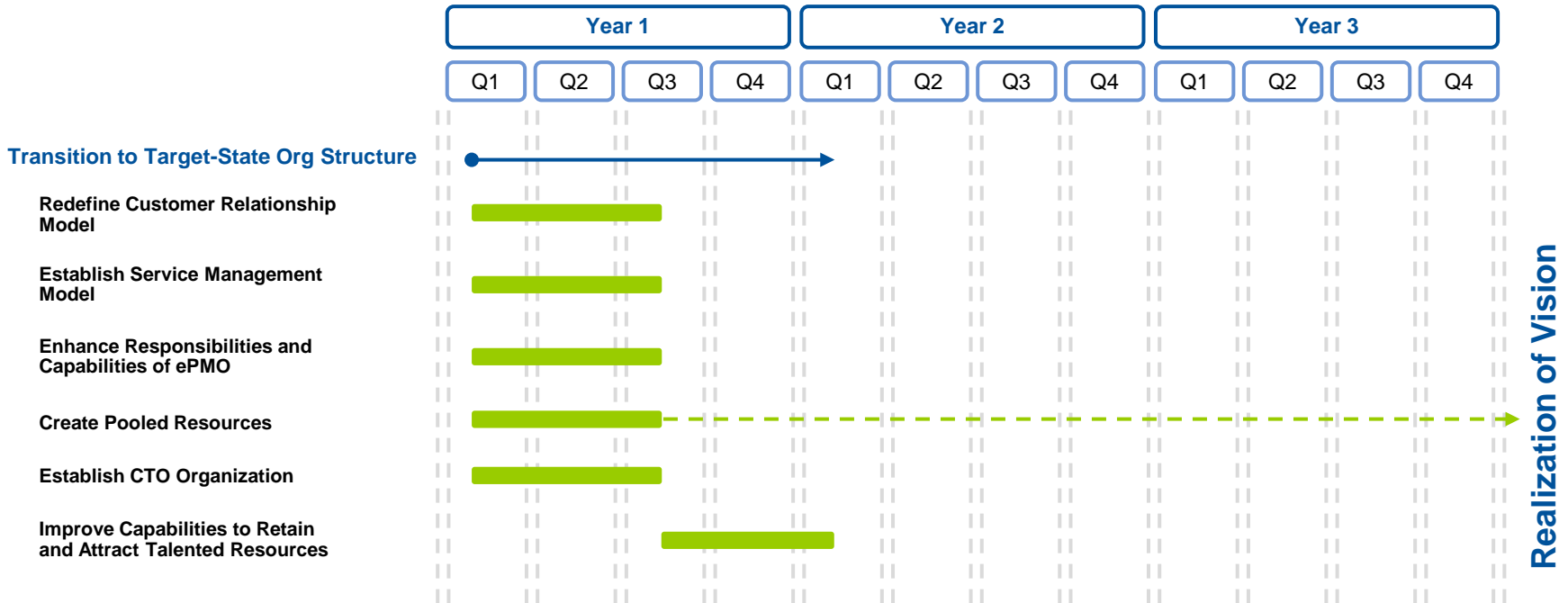
Cost Estimates	Chief Benefits	Major Deliverables
External Costs: \$850K–\$1.1M (est.) Internal Costs: \$1.584M–\$2.112M (est.) Potential Future Costs: <ul style="list-style-type: none">■ Continued pooling of resources during applicational rationalization	<ul style="list-style-type: none">■ Improved alignment with customers■ Improved service delivery■ Improved resource allocation■ Improved ICT staff capabilities■ Ability to coordinate all State ICT projects■ Proactive development of innovative solutions that respond to business needs■ Improved solution consistency across the enterprise	<ul style="list-style-type: none">■ Responsible/Accountable/Counsulted/Informed (RACI) models■ Revised organization charts■ Transition road map for pooled resources■ Customer service plans■ Service management plans■ Statewide innovation plan■ Updated job titles and job descriptions for ICT

Strategize Phase

Program B: Transition to Target-State Organizational Structure — Road Map



- DTMB should immediately begin Program B in order to modify the current organizational structure. After defining the roles and responsibilities within the organization, DTMB can update job titles and define career paths that map back to the expectations for each role. Also, DTMB will be better positioned to understand, develop and attract needed skills for the organization.



Strategize Phase

Program C: Improve Customer Alignment

- Program C is focused on improving existing customer relationships, exploring potential partnerships and addressing immediate business needs.
- The completion of Program C will improve DTMB's relationship with its ICT customers and will identify partnerships that may yield additional economies of scale. The projects that comprise Program C are as follows:
 - C-11: Enhance Current Relationships
 - C-12: Explore New Customer Partnerships
 - C-13: Address Unfulfilled Customer Requirements.
- The table below summarizes the estimated costs, benefits and major deliverables for the program.

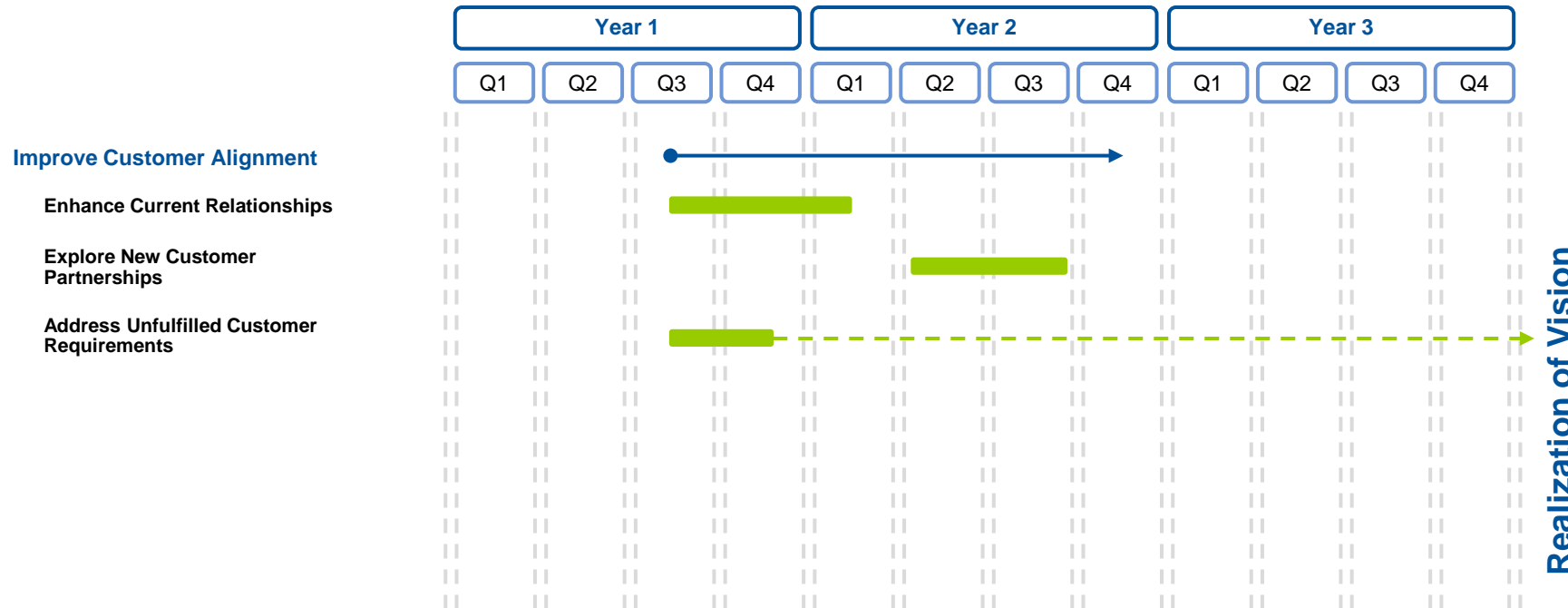
Cost Estimates	Chief Benefits	Major Deliverables
External Costs: \$400K–\$500K (est.) Internal Costs: \$704K–\$968K (est.) Potential Future Costs: <ul style="list-style-type: none">■ Mobility solution implementation■ BI solution implementation■ Customer self-service implementation	<ul style="list-style-type: none">■ Increased customer satisfaction■ Perception of DTMB as as strategic partner to the customer■ Economies of scale for ICT procurements■ New services that address stated business needs by customers	<ul style="list-style-type: none">■ ICT strategic plans for all customers■ Documented customer satisfaction measurement process■ A formal DTMB Service and Solution Marketing Strategy■ Signed partnership agreements with new partners■ Service offerings in the service catalog for mobile and BI solutions■ An assessment of the business need and requirements for a customer self-service offering by the State

Strategize Phase

Program C: Improve Customer Alignment — Road Map



- Although improving customer relationships is a high priority for DTMB, the focus should be on establishing a customer service organization that will address the needs of the business. Once this foundation is established, DTMB should focus on Program C, which will build on the revised customer service organization and establish DTMB as a strategic partner to new and existing customers.



Strategize Phase

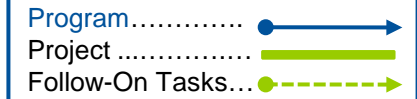
Program D: Improve Procurement

- Program D is aimed to fundamentally improve the composition and operation of the procurement, contract management and vendor management functions within DTMB.
- Execution of Program D will introduce added standardization and efficiency into core procurement processes; create standard manuals, templates and training for State employees; and ensure that the State is getting the best value for its ICT contracts and investments.
- The projects that comprise Program D are as follows:
 - D-14: Implement Procurement Fundamentals
 - D-15: Develop Vendor Management Discipline
 - D-16: Prepare and Plan for the Procurement of an eProcurement System.
- The table below summarizes the estimated costs, benefits and major deliverables for the program.

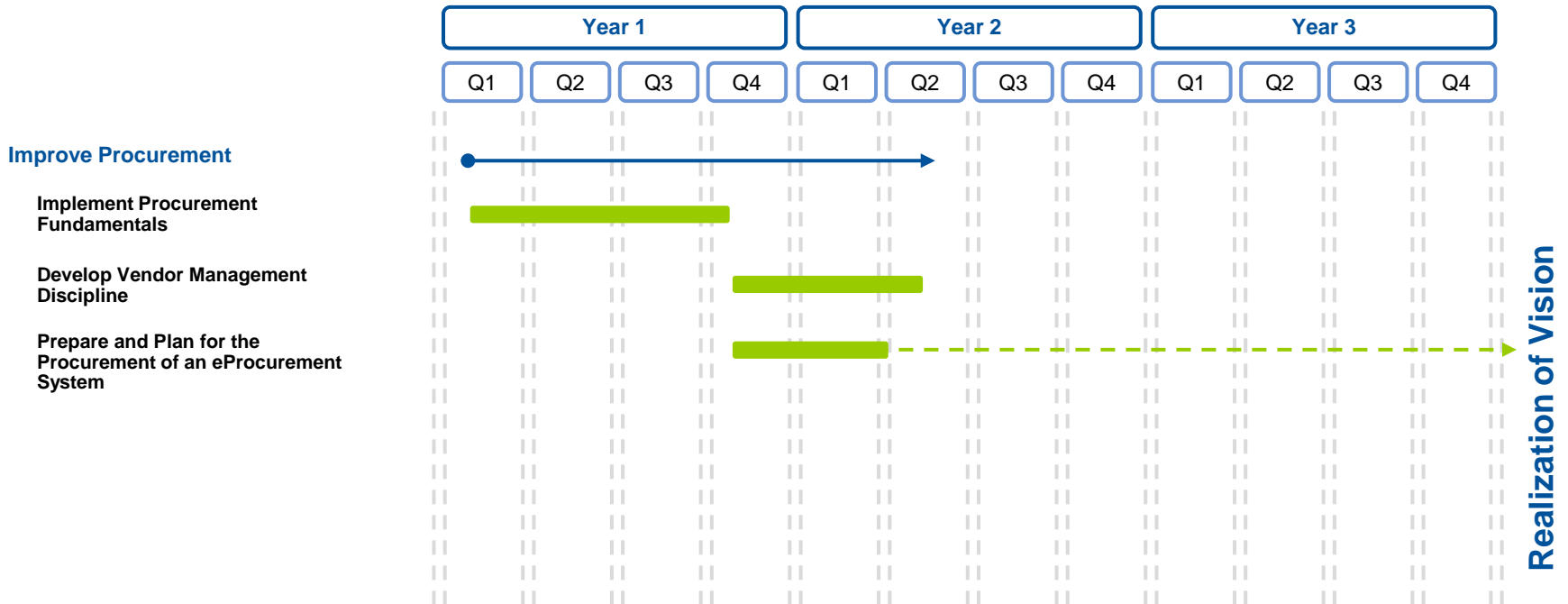
Cost Estimates	Chief Benefits	Major Deliverables
External Costs: \$925K–\$1.6M (est.) Internal Costs: \$1.1M–\$1.8M (est.) Potential Future Costs: <ul style="list-style-type: none">■ eProcurement software and implementation■ Software licensing tracking solution, and exploration of other automation opportunities	<ul style="list-style-type: none">■ Standardized and automated processes and increased efficiency■ Improved contracts, terms and conditions■ Vendor oversight to reduce contract risk and maximize value■ Aggregated, centralized view of contracts and renegotiation targets■ Enforcement of procurement policies and rules■ Spend analysis capacity■ Baseline reporting and dashboards	<ul style="list-style-type: none">■ Documented Procurement Future Operating Model and Re-engineered Business Processes■ Procurement Manual(s) and Standardized Templates■ Vendor Management Charter, Org. Model and Staffing Plan■ Contract Management Tracking Tool/Contract Portfolio Scorecard■ Renegotiation Target Matrix■ eProcurement Business Case, Procurement and Implementation

Strategize Phase

Program D: Improve Procurement — Road Map



- Program D should begin immediately to address critical procurement needs, and to support sourcing activities emanating from other programs. The eProcurement project duration and budget must be estimated through development of a business case — hence, the follow-on implementation tasks illustrated below.



Strategize Phase

Program E: Facilitate Project Prioritization and Portfolio Management

- Program E is focused on establishing processes to budget, coordinate and manage ICT projects within the State.
- The completion of Program E will allow DTMB to improve the monitoring and management of large ICT investments. The projects that comprise Program E are as follows:
 - E-17: Institute ICT Investment Management
 - E-18: Improve Project Portfolio Management
 - E-19: Enhance Project Management.
- The table below summarizes the estimated costs, benefits and major deliverables for the program.

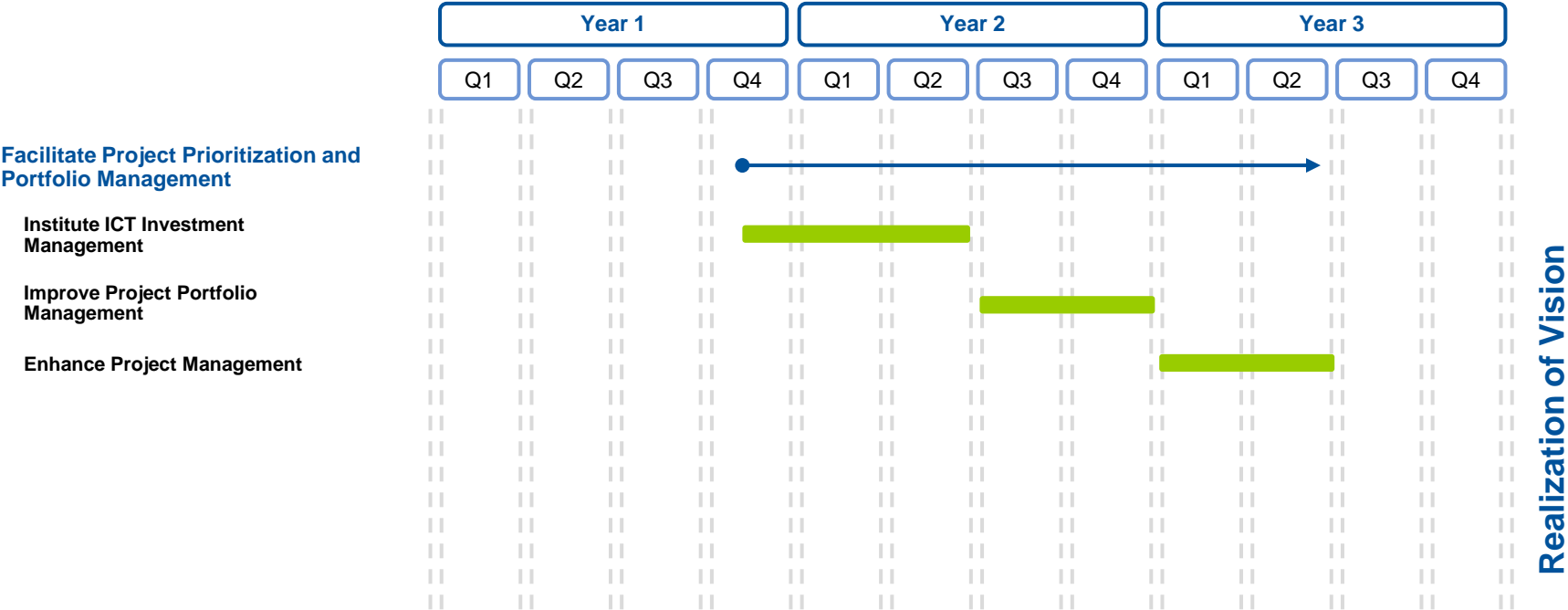
Cost Estimates	Chief Benefits	Major Deliverables
External Costs: \$500K–\$700K (est.) Internal Costs: \$792K– \$1.144M (est.) Potential Future Costs: ■ N/A	<ul style="list-style-type: none">■ The State will focus on the business benefits from ICT investments■ The State will better leverage existing resources to accommodate project demands	<ul style="list-style-type: none">■ RACI models■ Defined templates for ICT project funding requests■ ICT Project Portfolio for projects in progress and on hold■ Documented process for handling customer change requests to project scope, schedule or budget

Strategize Phase

Program E: Facilitate Project Prioritization and Portfolio Management — Road Map



- Although improving the management of ICT investments and projects is very important to DTMB, the focus should be on empowering the ePMO to manage the enterprise project portfolio. Once this foundation is established, DTMB should focus on Program E, which will allow the State to appropriately budget ICT investments and to allocate ICT resources.



Strategize Phase

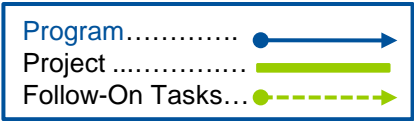
Program F: Define Service Offerings

- Program F is focused on preparing an enterprise service catalog with defined rates and service levels, and determining the appropriate sourcing strategy for each service.
- The completion of Program F will result in the implementation of an enterprise service catalog and a statewide sourcing strategy. The projects that comprise Program F are as follows:
 - F-20: Define Enterprise Service Catalog
 - F-21: Define and Implement Sourcing Strategy.
- The table below summarizes the estimated costs, benefits and major deliverables for the program.

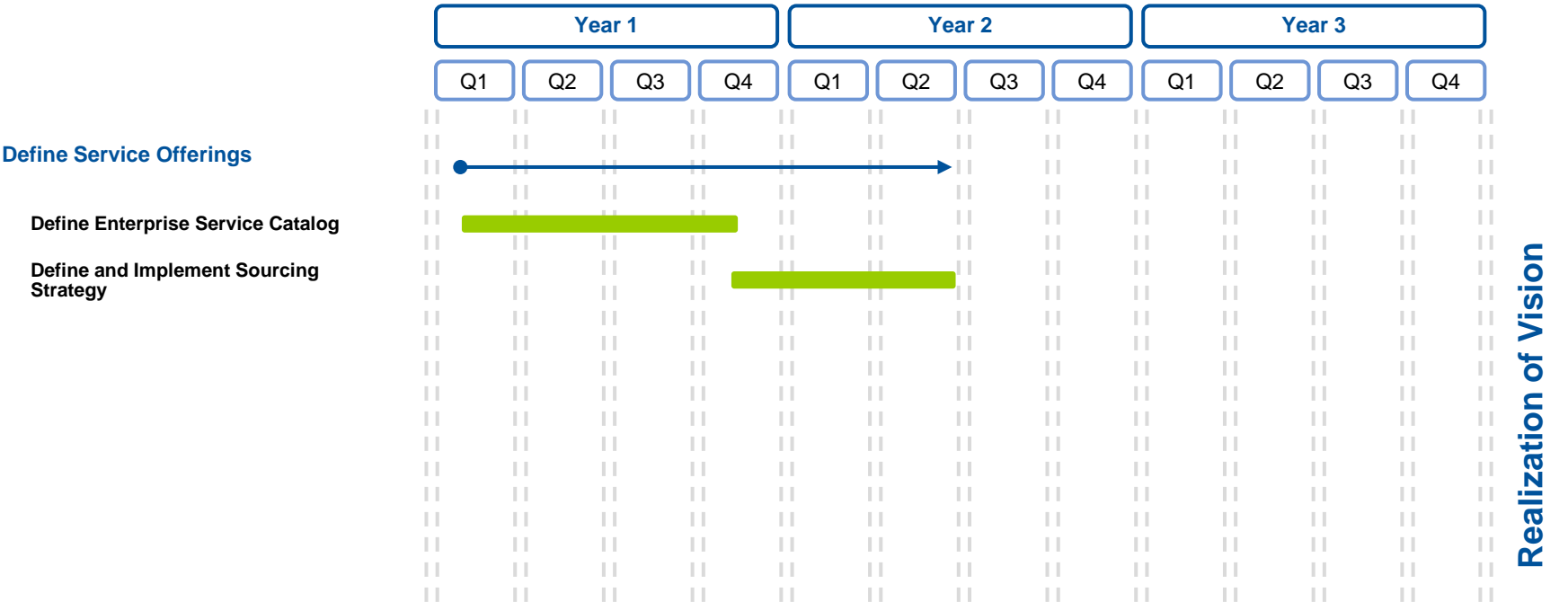
Cost Estimates	Chief Benefits	Major Deliverables
External Costs: \$750K–\$950K (est.) Internal Costs: \$704K– \$1.056M (est.) Potential Future Costs: ■ N/A	<ul style="list-style-type: none">■ DTMB services will be consistently defined■ Sourcing strategy and decision model to streamline decision making and yield wiser investments■ Deep understanding of current costs/pricing in relation to market■ Ongoing model for assessing service costs and pricing vs. outsourcing options	<ul style="list-style-type: none">■ Enterprise Service Catalog■ Rate Card■ Sourcing Strategy Document■ Business Case for each service to determine immediate sourcing decisions and model for future decisions■ Road Map for Tactical Implementation of Sourcing Strategy

Strategize Phase

Program F: Define Service Offerings — Road Map



- DTMB should immediately begin Program F in order to define an enterprise service catalog. Although it is ideal to have the enterprise service catalog in place before defining a Statewide Sourcing Strategy, DTMB can begin the development of a sourcing strategy in concurrence with the enterprise service catalog definition.



Strategize Phase

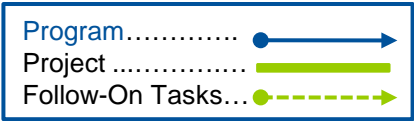
Program G: Improve Infrastructure and Security

- Program G focuses on building off the past successes within the infrastructure and security domains to drive further efficiencies and adopt leading practices.
- Through the delivery of Program G, the State will institutionalize continuous improvement activities for two of its most successful disciplines, while also increasing proactive protection of State assets and data.
- The projects that comprise Program G are as follows:
 - G-21: Increase Infrastructure and Operations (I/O) Maturity and Automation
 - G-22: Enhance Security Discipline.
- The table below summarizes the estimated costs, benefits and major deliverables for the program.

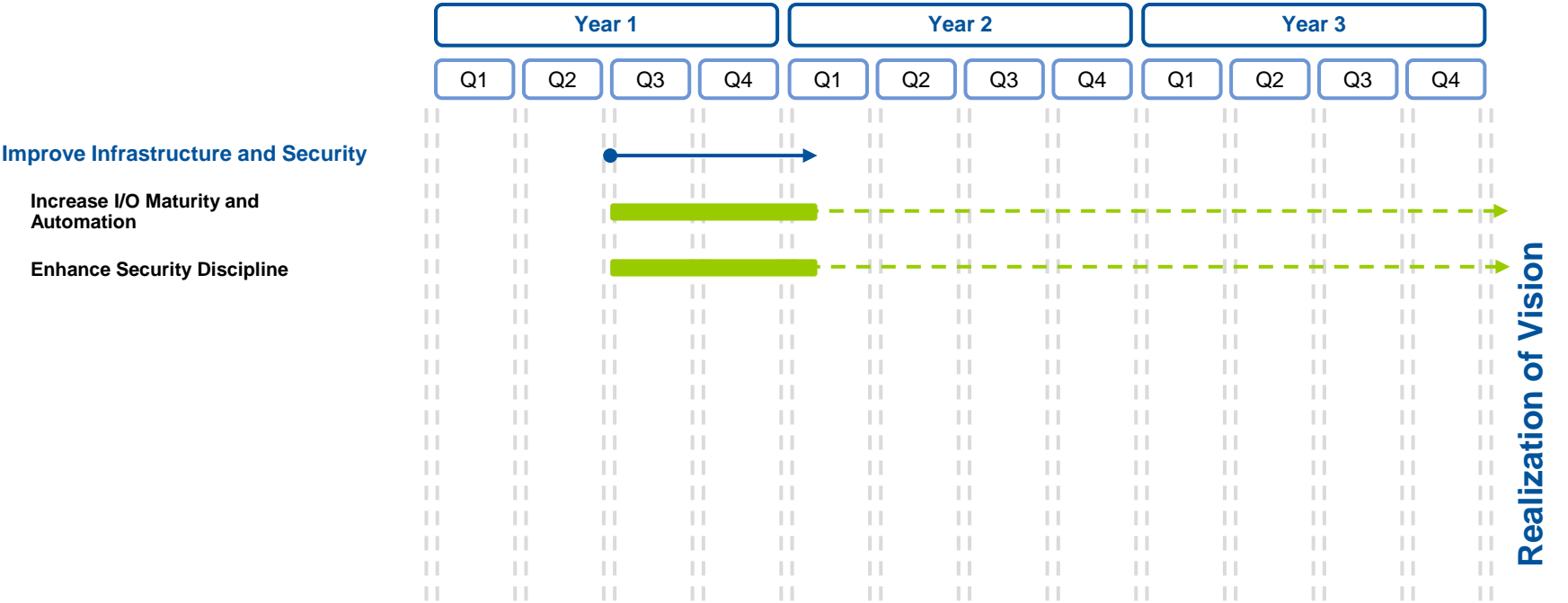
Cost Estimates	Chief Benefits	Major Deliverables
External Costs: \$500K–\$700K (estimated cost for a high-level security assessment) Internal Costs: TBD Potential Future Costs: <ul style="list-style-type: none">■ I/O Automation Tools■ 24/7 Security Operations Center (SOC) implementation/augmentation cost■ Vulnerability Improvement Tools	<ul style="list-style-type: none">■ Increased efficiency of service delivery■ Lower total cost of ownership■ Identify and rectify relevant vulnerabilities■ 24/7 capability of monitoring and responding to security threats■ Decreased vulnerability	<ul style="list-style-type: none">■ Business Case for Tool Acquisitions■ Implementation of ICT Operations Tools■ Information Technology Service Management (ITSM) Road Map and Updated Documentation■ Single, or integrated, Configuration Management Database (CMDB)■ Completed Security Audit/Risk Assessment■ Establishment of 24/7 SOC Operations■ Vulnerability Improvement Plan and Acquisition of Appropriate Tools

Strategize Phase

Program G: Improve Infrastructure and Security — Road Map



- Program G is composed of some tasks and projects that can begin immediately, as well as several ongoing tasks that will persist going forward. Opportunities for increased automation and maturing internal I/O processes will continue, as will security improvements and being proactive in protecting the State from new threats. Assuming funding and capacity are sufficient, the comprehensive security audit and risk assessment could begin immediately.

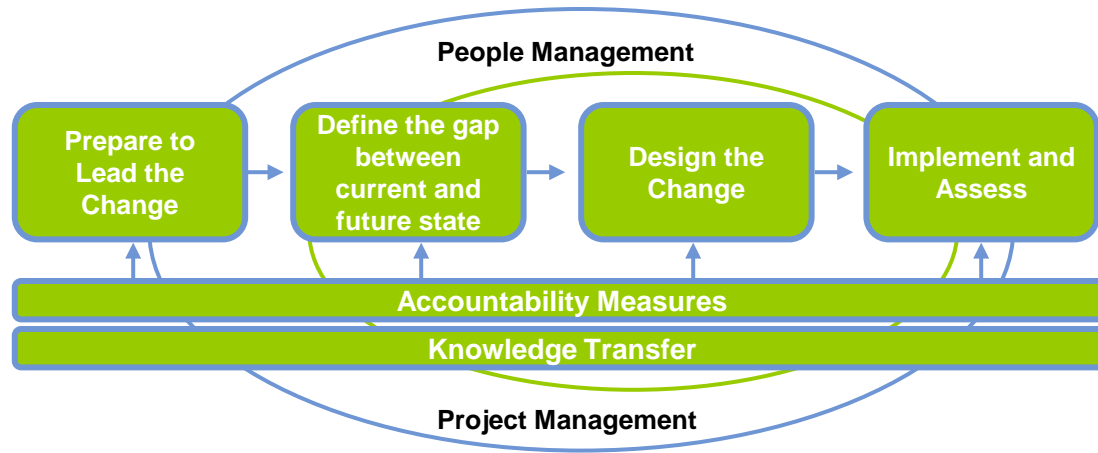


Change Management Plan

Change Management Plan

Overview

- Organizational change management addresses the human and organizational aspects of change initiatives. It is a deliberate approach to bring major changes toward people's expectations to move DTMB and stakeholders forward smoothly.
- Change management orchestrates the numerous variables that operate as a system, such as individual personalities, corporate culture, and unique dangers and opportunities.
- Change activities increase commitment and build support for the project by informing and involving individuals impacted by organizational transformation. By conducting change management activities, DTMB can expect to perform rapid changes while maintaining consistency.
- Gartner recommends a disciplined, yet flexible, change management framework that can appropriately address the people issues associated with transformations such as those DTMB will undertake.



Change Management Plan

Recommended Change Management Activities

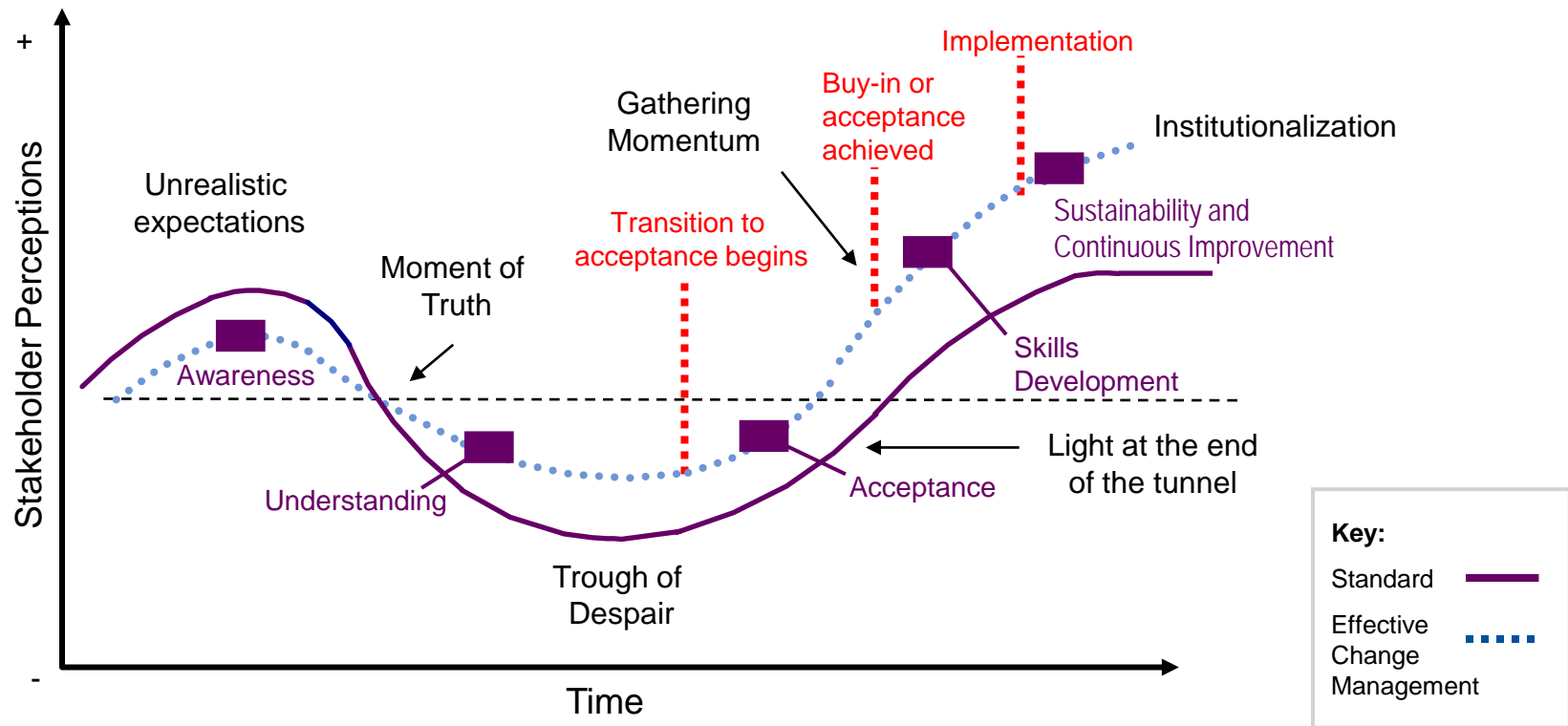
- Beginning with change readiness tasks, Gartner recommends that DTMB execute the following change management activities to ensure the success of the road map implementation.

Change Management Activities	Objective	Results
Change Readiness	Prepare the organization for change	<ul style="list-style-type: none"> ■ Mobilized community ■ User acceptance and buy-in
Change Leadership and Stakeholder Management	Manage expectations	<ul style="list-style-type: none"> ■ Aligned executives and employees ■ Executive commitment managed through the life of the project
Organizational Design/Alignment	Align people to strategy and process	<ul style="list-style-type: none"> ■ Organization aligned with strategies and operational requirements ■ Jobs defined and employees clearly assigned
Communications Plan	Educate the organization	<ul style="list-style-type: none"> ■ Increased executive and employee awareness of project activities and impact
Knowledge Transfer	Prepare and transfer skills	<ul style="list-style-type: none"> ■ Educated community to enable ownership of the new processes and system
Reinforcement Mechanisms	Reinforce desired behavior	<ul style="list-style-type: none"> ■ Adopted process and performance changes behaviors ■ Achievement of business case

Change Management Plan

Importance of Stakeholder Management

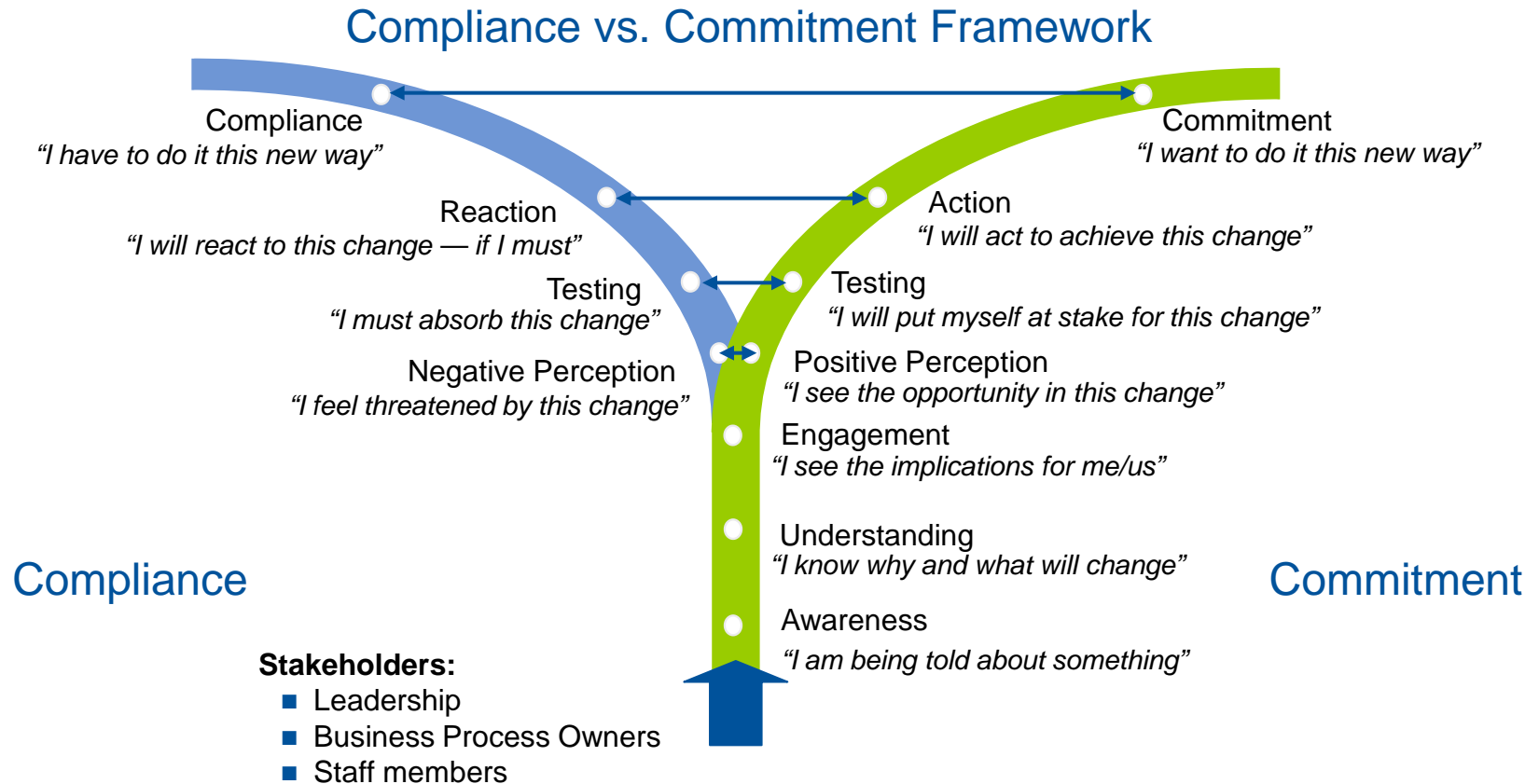
- DTMB must engage stakeholders in the appropriate activities at the appropriate time to gain their commitment and support. Failure to do so can lead to severely negative consequences.



Change Management Plan

Compliance vs. Commitment

- DTMB must build a deep understanding of where stakeholders are today and where they need to be tomorrow in order to foster commitment as opposed to compliance.



Change Management Plan

Employee Change Readiness Survey

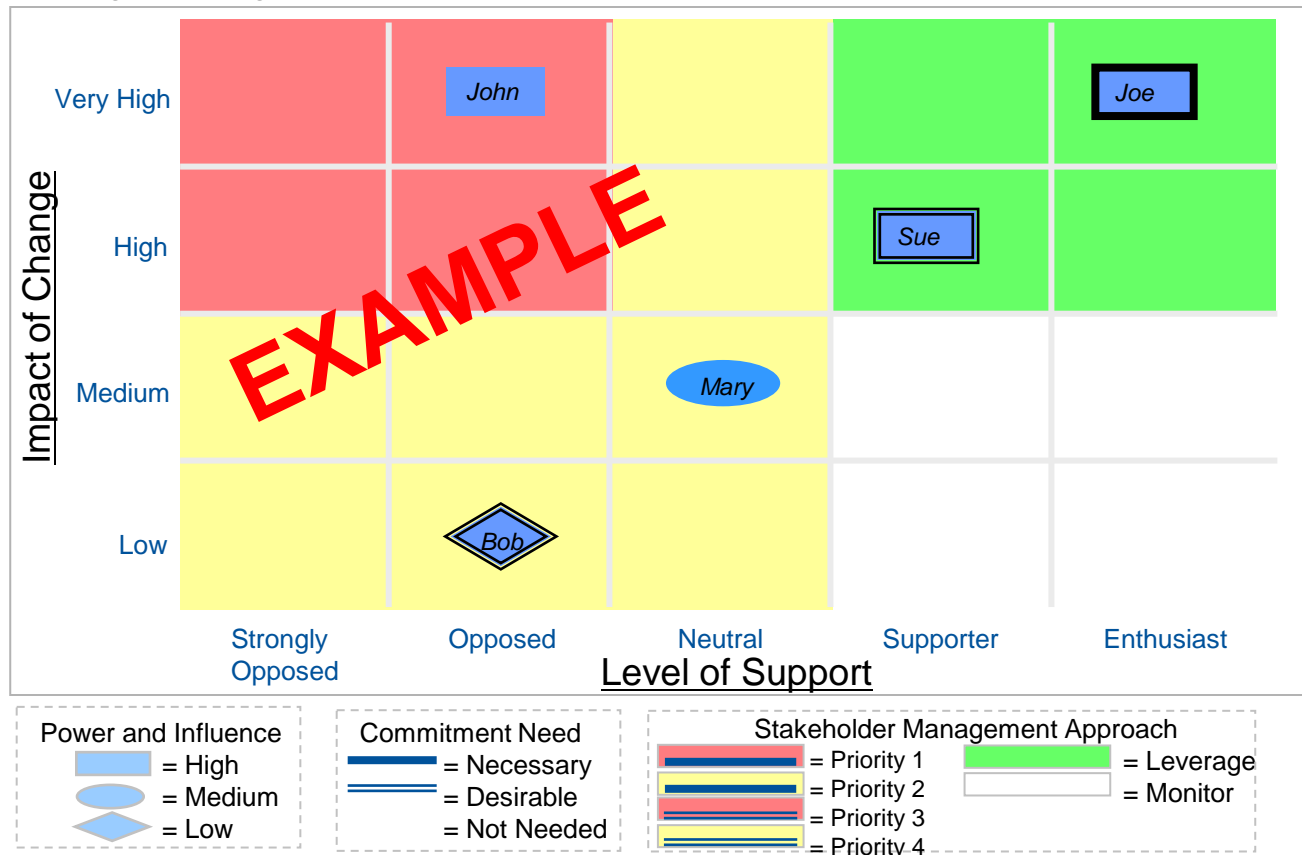
- Gartner recommends that DTMB issue a change readiness survey to its employees, or a logical subset thereof. Performing this at the onset of the road map implementation will provide a baseline and feed the specific activities that will follow to gain commitment

Employee Change Readiness Survey Example					
Question	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I am clear on the reasons for this change and how it positively impacts the goals of the business.					
2. A vision of how things will look after the change has been communicated effectively, and is clear to myself and my peers.					
3. I am confident the IT leadership team is committed to ensuring the success of this change initiative.					
4. I receive timely, accurate and honest communication regarding the change and its impact.					
5. I understand what I personally will need to do differently to support and effect this change.					
6. I have a commitment to do my part to ensure the success of this change initiative.					
7. I have opportunities to provide my input and express my concerns and opinions.					
8. I believe that my views and input are listened to and given proper consideration.					
9. I believe we have the resources and support for this change to be successful.					
10. I believe that I have the skills and knowledge needed to fulfill what is expected from me to achieve the change-related goals.					

Change Management Plan

Stakeholder Mapping

- Using the results of the change readiness survey, DTMB can then map stakeholders on a matrix such as the example below to fully analyze what the optimal and achievable level of commitment is to govern change management activities.



Change Management Plan

Stakeholder Mapping (Cont'd)

- Once priorities have been defined, action plans can be developed and tracked in parallel to project management and program execution activities to monitor progress toward the desired state.

Stakeholder Analysis Template							
Name/Groups	Strongly Against	Moderately Against	Neutral	Moderately Supportive	Strongly Supportive	Concerns	Action Plan to Bring to Desired State
Agency Services		X				Uncertain about the impact of new structure to the service delivery process.	Include representatives from Business Unit 1 in the design task force. Conduct one-on-one meetings to discuss implications.
Procurement			X			Changing jobs/role requirements require new job evaluations and a pay analysis. The concerns are that some of the roles are unique, that market compensation data may not be readily available, and that there are limited, internal resources available to do the work.	Review and update position description questionnaires. Provide a budget for consultant resources to supplement staffing needs for the project.

EXAMPLE

Change Management Plan

Knowledge Transfer Approach

- The overall approach to knowledge transfer is primarily driven by the competencies and culture of the organization.
- Specifically, DTMB should perform the following in relation to knowledge transfer:
 - Understand which competencies DTMB wants to maintain and target individuals who should develop them
 - Identify competencies and create individual, role-based Knowledge Transfer development plans (competency areas include: Technology, Process, Configuration, Tools, Methodology, Benefits Realization, Change Management, Training, etc.)
 - Develop knowledge transfer evaluation criteria
 - Conduct and monitor ongoing knowledge transfer activities
 - Develop knowledge transfer contracts with employees that define desired results and expectations for all parties
 - Assess results at key milestones and develop remediation plans as required

Knowledge Transfer Approach



Knowledge Transfer Plan



Just-In-Time Training



On-The-Job
Training/Knowledge Transfer



Fully Enabled Project Team

Change Management Plan

Next Steps — Planning

- Gartner research recommends a series of activities for planning, implementation and measurement of organizational change management. The key planning steps are outlined below.

Organizational Change Management Plan		
Planning	Key Activities	Owner
1. Communicate the strategy. (Answer the question, “What are the drivers for the organizational design initiative?”)	1. Hold town hall meetings and team meetings to communicate strategy. 2. Identify sponsors for the change.	CIO and IT leadership team
2. Understand the degree of resistance or support for change from the stakeholders (e.g., business units, HR and union representatives).	1. Conduct stakeholder analysis	CIO, change management specialist, communications and HR
3. Review draft organizational design options with stakeholders and modify as needed.	1. Conduct a meeting or series of meetings with stakeholders to collect feedback and gain support.	CIO/change management specialist
4. Assess the organizational impact of each proposed design option, and select the final structure to ensure proper alignment with processes, technology and available resources.	1. Analyze financial impact (e.g., budget for additional head count, outsourcing cost savings). 2. Analyze risks (e.g., staff turnover, operational impact). 3. Analyze change impact on workflows, IT and business processes. 4. Conduct employee change readiness survey. 5. Perform skills inventory and gap analysis.	Change management specialist, finance, HR and legal
5. Develop the change implementation strategy and plan.	1. Form the implementation team composed of nominated representatives by key stakeholders. 2. Develop an organizational change management strategy and governance plan. 3. Develop communication plan. 4. Develop a workforce transition plan (selection, redeployment, development and termination).	CIO, change management specialist, communications, HR and legal

Change Management Plan

Next Steps — Implementation

- Once planning tasks are complete, the following implementation tasks can be executed.

Organizational Change Management Plan		
Implementation	Key Activities	Owner
1. Execute the communication plan.	1. Follow specifics of plan.	IT leadership, change management specialist, communications and HR
2. Identify milestones to check progress against change management plan.	1. Conduct regular implementation team meetings. Engage stakeholders as needed to address issues and adjust course of action.	Change management specialist
3. Develop a response strategy to address and mitigate risks.	1. Track turnover (who is leaving and why?). 2. Identify critical roles and key staff. Develop retention programs. 3. Establish processes for feedback and grievances. Respond to internal and external disruptions that could affect the execution of the plan.	IT leadership, change management specialist and HR
4. Align people resources to the new organizational structure.	1. Define and update the job descriptions and performance expectations for the jobs/roles. 2. Conduct job evaluations and pay-grade analysis for new and revised jobs. 3. Map existing staff to jobs/roles based on skills and competencies (and, when possible, preferences). 4. Determine external sources to fill the skill gaps (contractors and consultants).	IT leadership and HR
5. Improve the effectiveness of the new structure through staff development.	1. Develop training programs and development plans based skill inventory and gap analysis. 2. Provide training to managers and staff on change management. 3. Define career paths and development road maps.	HR
6. Create feedback mechanisms for staff.	1. Conduct one-on-one meetings, focus groups and other feedback mechanisms.	IT leadership, change management specialist and HR

Change Management Plan

Next Steps — Measurement

- Finally, measurement tasks will ensure that progress is being effectively tracked, and allows for “course correction” if results are not trending to desired commitment outcomes.

Organizational Change Management Plan		
Measurement	Key Activities	Owner
1. Identify key metrics and develop a baseline for each.	1. Identify IT operation and business performance metrics. 2. Assess and set baselines before the reorganization.	CIO and finance
2. Assess change program effectiveness.	1. Conduct change effectiveness survey.	Change management specialist and HR
3. Assess the effectiveness of the communication program.	1. Evaluate the effectiveness of communication mediums.	Change management specialist and communications
4. Make modifications as needed (e.g., adjust processes and role requirements).	1. Conduct annual review. Incorporate this into IT strategy/planning process.	CIO, leadership team and key stakeholders

Change Management Plan

Gartner Best Practices

- Integrate organizational change activities into the program or project plan. The likelihood of successful change is decreased if the activities are left undefined or not assigned accountability.
- Define the measurements that will identify if the activities have been successful or pose risk to the overall program or project.
- Understand your organizational culture and how best to present the changes that are being contemplated.
- Budget specifically for organizational change activities. Assume that some of them will need to be done at the beginning of the project (e.g., change readiness assessments), and others will need to be done after new business processes have been implemented.
- Organizational change activities will generally decrease over time, but clients have told us that ending them prematurely resulted in projects that were initially judged as successes at implementation being redefined as failures on their one-year anniversary dates.
- Obtain the skills necessary to execute organizational change activities. Seek outside help if your enterprise lacks the skills, but plan on having this discipline in-house for long-term success by including a knowledge-transfer clause in the contract.

“Enterprises that fail to help people absorb and navigate new information flows, new group dynamics and new work styles will undercut by half the anticipated value of their business process investments.”
— Gartner Research

Change Management Plan

Gartner Best Practices (Cont'd)

- Continue to learn and adopt new techniques that are tailored to your enterprise's culture and maturity. Project success is increased tenfold by organizations that do a good job in this area. Ignore these steps and suffer the consequences of failed projects.

“Enterprises that fail to help people absorb and navigate new information flows, new group dynamics and new work styles will undercut by half the anticipated value of their business process investments.”
— Gartner Research

Communications Plan

Communications Plan

Composition and Purpose

- Managing communication of themes, progress, benefits and other key information will be a critical task for DTMB as it executes the road map and helps transform the State of Michigan. An effective and malleable communications plan must underpin these activities.
- The objective is to define a management framework to ensure that the correct message is sent to the appropriate recipients, using the most effective medium and at the best time.
- This framework should also ensure that communications are consistent with each other and provide a feedback mechanism to ensure that the intended messages are being received and to enable open dialogue on project decisions and issues.
- DTMB must identify the key messages that should be delivered during execution of the road map. It is essential to clearly identify as many of these messages as possible so that all communications relating to the project are consistent — and understanding and expectations are as clear as possible among all stakeholders.

Communications Plan

Composition and Purpose (Cont'd)

- The objective of this framework is to (a) facilitate periodic communication of information required to give the key stakeholders — including the project team, ePMO and Executive Steering Committee — consistent and continual insight into the project; and (b) enable the project to communicate key messages to all the project's stakeholders using either periodic or one-time communications. The Communication Plan:
 - Guides project team communication efforts
 - Ensures information is disseminated at appropriate times
 - Assigns responsibility for communication plan tasks
 - Facilitates open dialogue regarding project issues and decisions.

Communications Plan

Communication Mechanisms

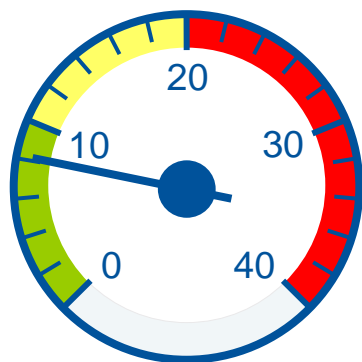
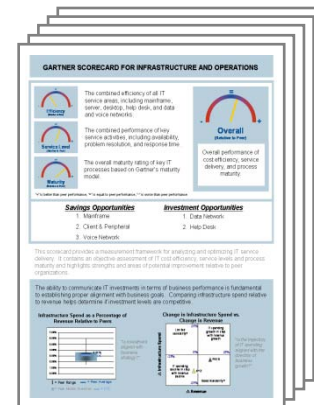
- DTMB must clearly define the different mechanisms for communication, the benefits of the particular communication mechanism, and the most appropriate scenarios for its use rather than other mechanisms. Below are the suggested mechanisms DTMB can use to effectively communicate with stakeholders.

Mechanism	Description	Objectives
Email	Standard method of communication to convey key messages, maintain momentum, tout successes and progress, and keep the programs “top of mind.”	Consistent method to “push” information and road map messaging to multiple stakeholder groups.
Status Meetings/ Reports	Tactical meetings to discuss progress, risks, issues and other project management-oriented topics.	Enforce project management practices and day-to-day execution.
Website/Dashboards	Online graphical illustration of road map and program progress from an execution and benefits realization perspective.	Convey progress in a “digestible” manner for a variety of audiences.
“Town Hall” Sessions	Informational meetings that can speak to future-state concepts, address rumors and key issues, and allow for an open forum for sharing ideas.	Maintain a collegial communication means that allows for interaction and addresses “water cooler” chatter.
Steering Committee Presentations	Formally convey progress from a business and project management perspective, and raise key decision points for governing body.	Executive communication of progress and benefits achieved, and input on key decisions impacting execution.
Customer Committee Presentations	Convey progress from a customer perspective and gain input as required to benefit program and road map execution.	Consistently keep customer base informed, and gather input as needed.
Surveys	Obtain input from stakeholders to help gauge perceptions of progress, refine program execution, and other means to benefit realization of goals.	Obtain standardized, measurable stakeholder input to aid program and benchmark progress.

Communications Plan

Criticality of Dashboards and Metrics

- Each program owner will be responsible for reporting key program metrics to the DTMB Director, the State CIO and impacted customers.
- In addition to project-oriented metrics (percentage complete, on time, on budget), each program should develop several business-oriented metrics that will convey the value of execution of the programs in achieving State goals.
 - Examples include cost savings, customer satisfaction, increased efficiency
- DTMB should assess the viability of dashboards that convey progress to customers, executives and other stakeholder groups in meaningful, “easy-to-digest” graphs and figures.



Number of Legacy Applications Retired, 2013

- As an example, legacy systems retired as a result of implementing the application rationalization process could be reflected through a simple, but powerful, graphic that counts the number of retired systems during a specified period of time.
- Developing three to five metrics for each program will promote transparency and progress to all stakeholders.
- To that end, each program is summarized on the subsequent slides, highlighting the drivers, projects, estimated costs, benefits and major deliverables. Program-specific road maps and charters for all projects are presented later in the document.

Communications Plan

Stakeholder Analysis

- One aspect of communications is to ensure that messages are delivered to the correct audience. To meet this objective, the various potential communication recipients and senders must be clearly defined. Stakeholders are also aligned to the most apt communication mechanisms.

Stakeholder	Most-Effective Communication Mechanisms	Description
Program Teams	Email, Status Meetings	Program team members will be close to project details and day-to-day execution of their program(s). As such, communication should be focused on tactical topics.
Steering Committee	Email, Website/Dashboards, Steering Committee Presentations	Steering Committee members should be apprised of only the most important progress and status topics, and should be utilized for making key road map decisions.
Customer Committee	Email, Website/Dashboards, Customer Committee Presentations	The Customer Committee should be informed at a level similar to the Steering Committee, but from a customer alignment perspective.
DTMB Employees	Email, Website/Dashboards, "Town Hall" Sessions, Surveys	DTMB employees at large, in particular those working in ICT, must be kept informed about what the road map does and does not mean for their jobs, the organization and the State.
Customer Base	Email, Website/Dashboards, Surveys	Customers at large should have information "pushed" to them at appropriate times to convey progress, alert of key dates, etc. Moreover, surveys can be used to gather key input.
General Public	Website/Dashboards	As appropriate, progress, upcoming improvements and other key messages can be shared with the public at large to tout maximizing the value of taxpayer dollars, and highlighting service and technology improvements that citizens can "touch."

Communications Plan

Communications Matrix

- Using the previous information, the Communication Matrix identifies specific communications that will be delivered during execution of the road map. At a minimum, Gartner suggests the communications below are part of the final communications plan developed by DTMB.
- Key roles such as the seven program managers, the road map implementation manager, and oversight/QA are noted in the matrix, and are also depicted on the Execution Model later in this deliverable.

Communication	Description	Frequency	Mechanism	Stakeholder Involvement
Road Map Launch Notification	Market the formal initiation of the road map and program execution.	One-time, at launch of road map	Email, Website/ Dashboards, Town Hall Session	Create: PIO Approve: CIO Dist: TBD Recip: All
Program Highlight Report	Status report for each program of key actions, decisions and progress, submitted to road map program manager.	Weekly	Status Meetings/Reports	Create: Program Teams Approve: Program Manager Dist: Road Map Imp. Manager Recip: Program Teams, Steering Committee
Program Status Report	Status report for each program detailing schedule, issues, risks, actions and other project management mechanisms.	Biweekly	Status Meetings/Reports	Create: Program Teams Approve: Program Manager Dist: Road Map Imp. Manager Recip: Program Teams, Steering Committee

Communications Plan

Communications Matrix (Cont'd)

Communication	Description	Frequency	Mechanism	Stakeholder Involvement
Road Map Status Report	Executive-level report of progress, issues, risks and key decisions required.	Monthly	Steering Committee Presentations	Create: Road Map Imp. Manager Approve: CIO Dist: Road Map Imp. Manager Recip: Steering Committee
Customer Committee Briefing	Executive-level report of progress, issues, risks and key decisions required.	Bimonthly	Customer Committee Presentations	Create: Road Map Imp. Manager Approve: CIO Dist: Road Map Imp. Manager Recip: Customer Committee
Road Map Progress Notifications	Regular updates of road map progress from project management and business perspective.	Quarterly/ Biannually	Email, Website/ Dashboards, Town Hall Session	Create: PIO Approve: CIO Dist: TBD Recip: All
Program Oversight/ QA Report	Overview of oversight activities for risk management and quality assurance at the program level.	Weekly	Status Meetings/Reports	Create: ePMO or outside vendor Approve: ePMO Dist: Road Map Imp. Manager Recip: Program Teams, Steering Committee
Road Map QA/ Risk Briefing	Overview key risk management and quality assurance issues from a road map execution perspective, including recommended corrective actions.	Monthly	Status Meetings/Reports	Create: ePMO or outside vendor Approve: ePMO Dist: Road Map Imp. Manager Recip: Program Teams, Steering Committee

Communications Plan

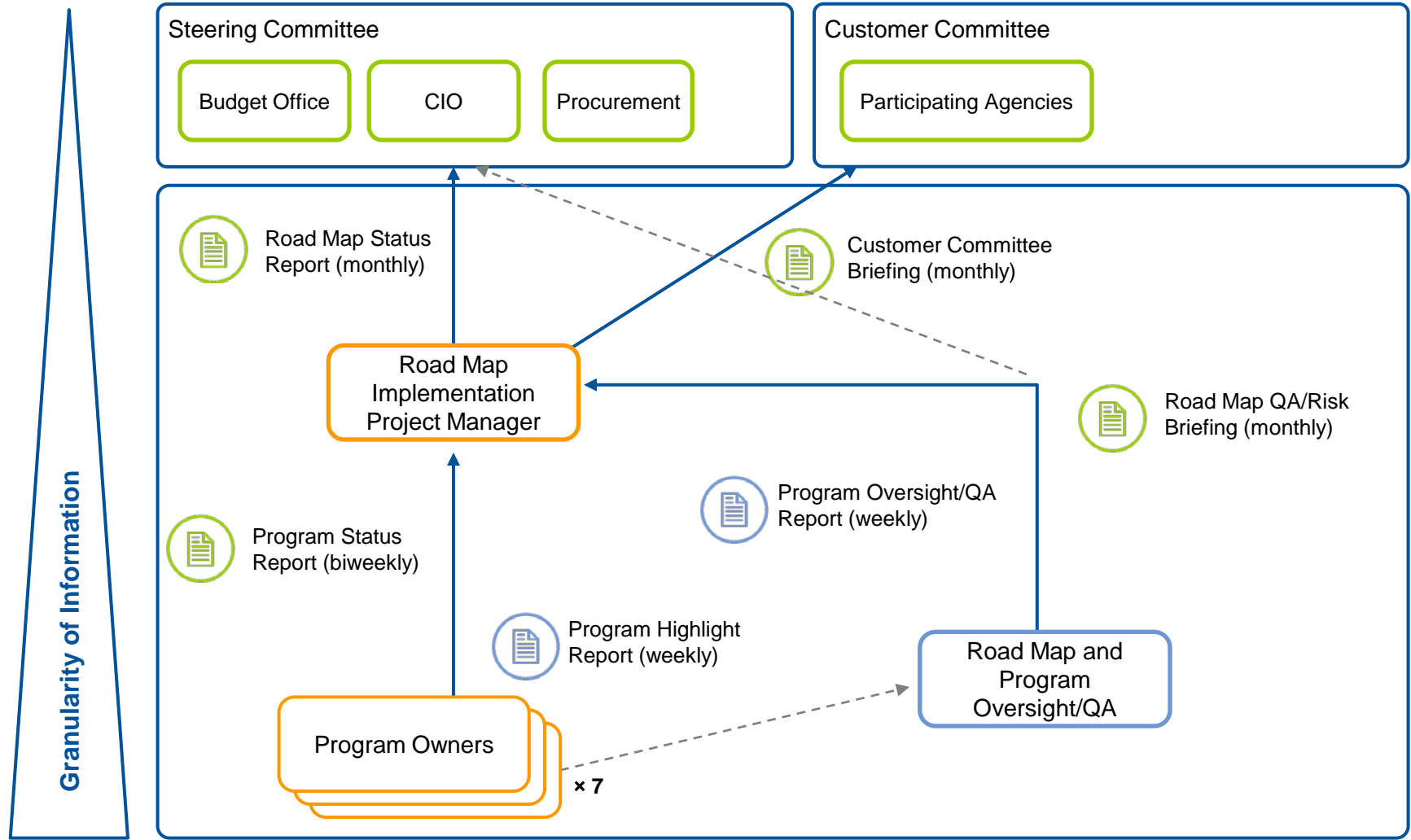
Execution Model



= weekly



= biweekly/monthly



Communications Plan

Next Steps

- DTMB must quickly use the Execution Model and Communications Plan elements described herein and perform a number of actions to finalize:
 - Identify and secure resources to fill key roles, such as the seven program managers, the road map implementation manager, and oversight/QA.
 - Review the communication mechanisms and modify as needed to develop the optimal list.
 - Rationalize the Communications Matrix and develop the most appropriate communications for the execution of the road map.
 - Assign an owner for the Communications Plan to ensure appropriate reaction to changes during implementation.
 - Confirm the stakeholder involvement (i.e., create, approve, distribute, receive) and communicate assignments.
 - Determine technology and resource needs for website/dashboard mechanisms to ensure readiness for launch of the road map execution.

Appendices

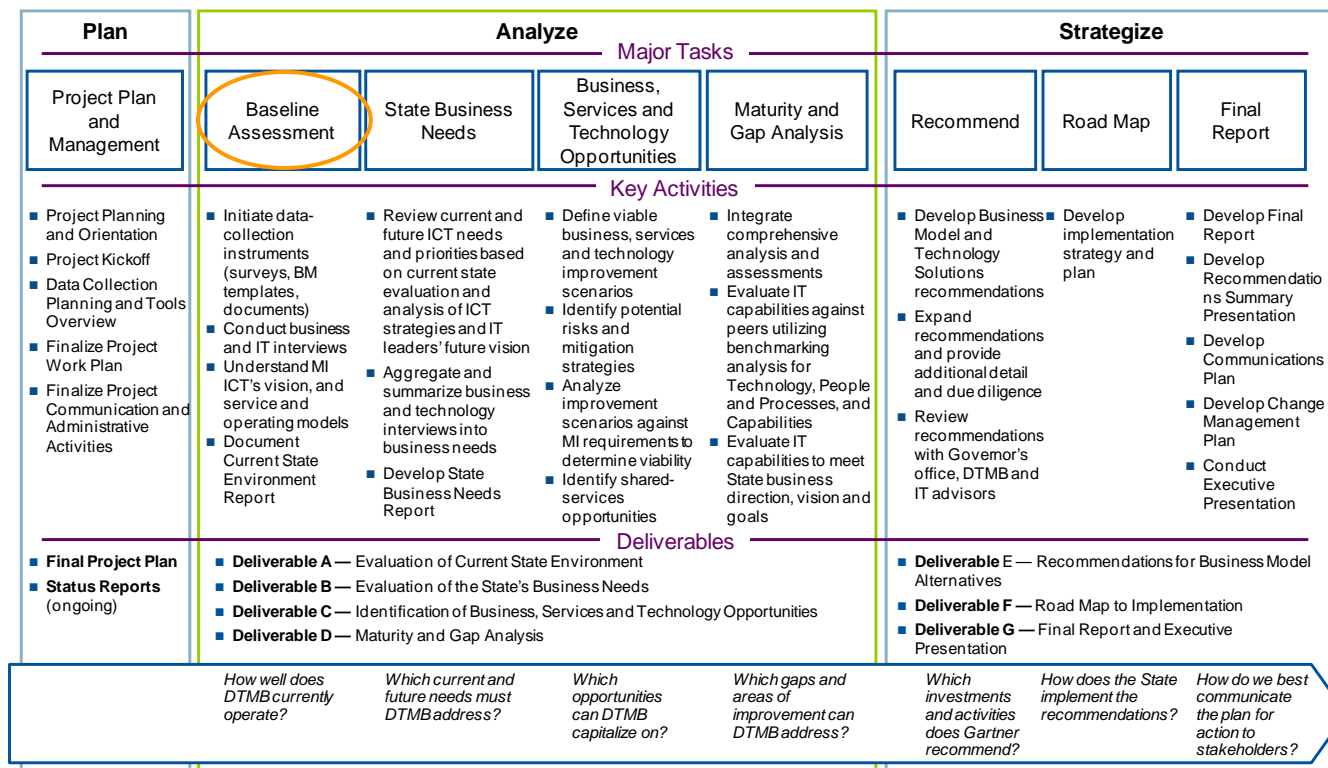
Appendix A

Deliverable A — Baseline Assessment Summary

Baseline Assessment

Gartner Approach

- Gartner began the project by conducting a baseline assessment that investigated the current state from both a quantitative and qualitative perspective.



Baseline Assessment

Background and Overview

- Gartner assimilated the information gathered to render a maturity level for each of the nine role perspectives (e.g., CIO: Business Alignment and Effectiveness, Applications, etc.) across each dimension of the TOPSS model: technology, organization, process, strategy and service level exhibited in the graphic below.
 - The maturity scale is developed on an idealized basis, meaning that a Level 5 is the absolute best practice in the industry for that activity. Relatively few organizations make the investment to become Level 5 in all the areas, because it would be prohibitively expensive to do so without a commensurate return on investment.
 - Target states were determined using a combination of feedback from DTMB customers' stated needs, and DTMB leadership's stated goal of becoming a best-in-class service provider. If achieved, the target states chosen will very highly likely exceed the performance of the vast majority of (if not all) public sector organizations.



Baseline Assessment

Primary Themes

The Baseline Assessment revealed a number of primary themes that span the nine IT roles. The themes are listed below and are substantiated and described in greater detail in the subsequent pages:

- **Customer Alignment and Relationship Management is Challenged** — The introduction of the Information Officer (IO) model to provide dedicated liaisons to agencies is a positive development, but DTMB must significantly improve customer alignment and relationship management to address customer dissatisfaction.
- **Unclear Business Value of DTMB Services** — Agencies understand the technical importance of DTMB support, but DTMB does not clearly communicate the business value of its services to customers.
- **Cost Control and Efficiency Opportunities Exist** — Although DTMB is established as a cost-recovery organization and has standardized budgeting and financial processes in place, DTMB needs to move to a portfolio management approach for DTMB assets to more effectively manage costs. DTMB exhibits characteristics that indicate opportunities for additional operational efficiencies.
- **Innovation Successes Lay Foundation for Future Improvements** — DTMB has been nationally recognized for several past innovations, but it must enhance its understanding of customer business needs and apply that understanding to future innovative efforts in a consistent, formalized manner.
- **Skilled, But Sub-optimally Utilized Workforce** — DTMB must address skills gaps in specific categories, misaligned titles and duties, and create formal accountability within DTMB.

Baseline Assessment

Primary Themes (Cont'd)

- **Procurement and Vendor Management Issues Impact Efficiency** — Many baseline procurement organizational/functional units are not established, leading to inefficiencies and delays; vendor management is not currently practiced by DTMB.
- **Continued Improvement of Strong Management and Protection of DTMB Assets** — DTMB is nationally renowned for cybersecurity and data protection, and touts effective operational capabilities, but can strive to keep improving. For example, DTMB can increase focus on privacy management and data security management to more effectively articulate rules and regulations that govern data sharing across State and federal agencies.

Baseline Assessment

Key Findings by Theme

Customer Alignment and Relationship Management Are Challenged

- DTMB is not viewed by many of its customer agencies as a customer-service-oriented organization and may be failing to incorporate business needs into the IT strategy.
 - Bottom Line — Only 16% of agencies that participated in the ITBE survey reported that they viewed DTMB as a strategic partner that is fully aligned with their agency strategy and is an integral part of their business.
- Partnership opportunities with local government agencies could be greatly improved.
 - Bottom Line — Local governments are finding DTMB services prohibitively expensive (e.g., 800 MHz dispatch system) as a result of offerings not meeting their business needs, and express that DTMB does not effectively partner with them to understand customer requirements.

Unclear Business Value of DTMB Services

- Metrics and Service-Level Agreements (SLAs) provided to DTMB customers are not descriptive and do not meet customer needs; many customers are unaware of SLAs.
 - Bottom Line — DTMB needs to improve SLAs to demonstrate value and meet customer needs. Furthermore, DTMB needs to provide consistent metrics on SLA performance and communicate those with customers.
- Overall, Infrastructure and Operations (I&O) maturity is high, but is hampered by technology taking precedence over business alignment. Each technology platform has a unique service catalog.
 - Bottom Line — Strong technology alignment and multiple service catalogs make it more difficult to work collaboratively across Infrastructure Services in a coordinated and organized manner.

Baseline Assessment

Key Findings by Theme (Cont'd)

Cost Control and Efficiency Opportunities Exist

- The DTMB annual budget is not composed of specific initiatives and projects.
 - Bottom Line — This prevents DTMB from achieving the granularity it needs for scheduling, resource allocation and prioritization of activities. Without this information, DTMB cannot work with the agencies to prioritize resources or manage expectations, which results in customer frustration.
- DTMB has limited enterprise insight into demand/resource management and benefits realization.
 - Bottom Line — DTMB is unable to effectively perform portfolio and investment management and maximize enterprise value.
- Infrastructure Services is a consolidated and centralized IT infrastructure organization that is working on adopting and implementing industry-leading trends.
 - Bottom Line — Consolidation and centralization lead to optimization and standardization. Efficiencies from consolidation place the State of Michigan better than the peer average for I&O costs.
- There are numerous programming languages and development tools in place that are not standardized across development teams.
 - Bottom Line — Platform complexity is driving higher costs and the need for more programmers.
- Application Portfolio Management (APM) is still in its infancy, which limits the ability to proactively retire older technology platforms.
 - Bottom Line — The lack of APM results in reactive, tactical decisions for applications on older platforms that cannot be modified in order to avoid very difficult-to-resolve outages.

Baseline Assessment

Key Findings by Theme (Cont'd)

Innovation Successes Lay Foundation for Future Improvements

- Enterprise Architecture (EA) is viewed as a burdensome process focused on technical compliance. Key EA domains of Business Architecture, Information/Data Architecture, Integration Architecture and Solution Architecture are not managed at this time.
 - Bottom Line — Not managing key EA functions is an area of high risk, especially considering the federated nature of the agencies. It is also an area of discontent for customers, who desire more solution design earlier in the requirements definition process.
- No centralized Business Intelligence (BI) center of excellence (COE) exists to coordinate BI and corporate performance management (CPM) activities across DTMB.
 - Bottom Line — Performance Management is not connected to BI, which is not connected to Enterprise Information Management and Master Data Management, rendering citizen-centric government very difficult.

Skilled, But Sub-optimally Organized and Utilized Workforce

- Varying degrees of project management skill exist within various IO units.
 - Bottom Line — Varying skill levels of project managers result in wide gaps in customer satisfaction. Additionally, agency customers often view DTMB as unable to deliver large or innovative projects on-time and on-budget.
- The organizational structure of DTMB limits the authority, oversight and executive reporting responsibility of the ePMO.
 - Bottom Line — The ePMO is severely limited in its ability to effectively perform enterprise program and portfolio management because it reports to a single IO in Agency Services. For example, although DTMB has standardized on the SUITE methodology for project management, it has been inconsistently adopted.

Baseline Assessment

Key Findings by Theme (Cont'd)

Procurement and Vendor Management Issues Impact Efficiency

- Many baseline procurement organizational functions found in peers are missing — the procurement organizational structure seems unique to Michigan.
 - Bottom Line — The dispersion of procurement functions across organizational components adds complexity, which results in bottlenecks that lengthen the procurement process.
- The sourcing strategy is not integrated with the strategic technology planning, which results in delays and divergent priorities on what to bid and when.
 - Bottom Line — Lack of integration with strategic planning results in procurement being viewed as an inhibitor, and diminishes the DTMB's ability to enable strategic sourcing.

Continued Improvement of Strong Management and Protection of DTMB Assets

- DTMB is using the right tools, supports a mature architecture, and is involved in all the traditional security processes.
 - Bottom Line — This is a good foundation to improve security management processes.
- DTMB lacks a strong focus on privacy management and data security management.
 - Bottom Line — Privacy management is an increasingly important area in the industry. Lack of privacy management increases overall risk to the State.
- DTMB is not leveraging all capabilities of tools, or protecting the entire infrastructure consistently.
 - Bottom Line — Advanced threats through desktop applications can cause security breaches.

Baseline Assessment

Infrastructure Benchmark Key Takeaways

- DTMB Infrastructure Services generally performs at approximately the average vs. peers in terms of cost efficiency and staff productivity, which is considered good, since DTMB has not performed this kind of benchmark in the past. Gartner would generally expect a new benchmarking client to perform somewhere near the 75th percentile. A 75th percentile ranking is paramount to a spending cost in the top 25% of comparable peers).
- The State of Michigan spends \$15M less than the peer group for infrastructure. Spending is lower than the peer group in all functional areas. Drivers of the variance include lower spending in hardware, personnel, transmission and occupancy.
- Michigan spends more than the peer group in the software category for Help Desk, Unix, Internet and Storage. Wintel server software is lower than the peer group.

Bottom Line: Overall DTMB spending on infrastructure is slightly lower than average (\$15M) in comparison to peers, and overall cost efficiency and staff productivity is in line with peers, despite slightly lower staffing. However, DTMB spends more on certain software categories (Help Desk, Unix, Internet, Storage) than peers.

Baseline Assessment

Infrastructure Benchmark Key Takeaways (Cont'd)

- Total staffing is lower than the peer group, with Michigan at 616 and the peer group at 626.
 - Michigan utilizes fewer FTEs in some areas, such as Client and Peripheral, Unix and Data Networking, but more FTEs than the peer group in Wintel and Voice.
 - The cost per FTE is lower at Michigan compared to the peer group.
 - Michigan and the peer group utilize a similar number of external staff resources. Michigan utilizes more contractors than the peer group, at 40 vs. 26.4, but the peer group uses more outsourcing, with 28 FTEs.
 - Per-capita spending on contractors is generally higher at Michigan, with the exception of the Help Desk and Storage.

Bottom Line: Overall DTMB spending on infrastructure is slightly lower than average (\$15M) in comparison to peers, and overall cost efficiency and staff productivity is in line with peers, despite slightly lower staffing. However, DTMB spends more on certain software categories (Help Desk, Unix, Internet, Storage) than peers.

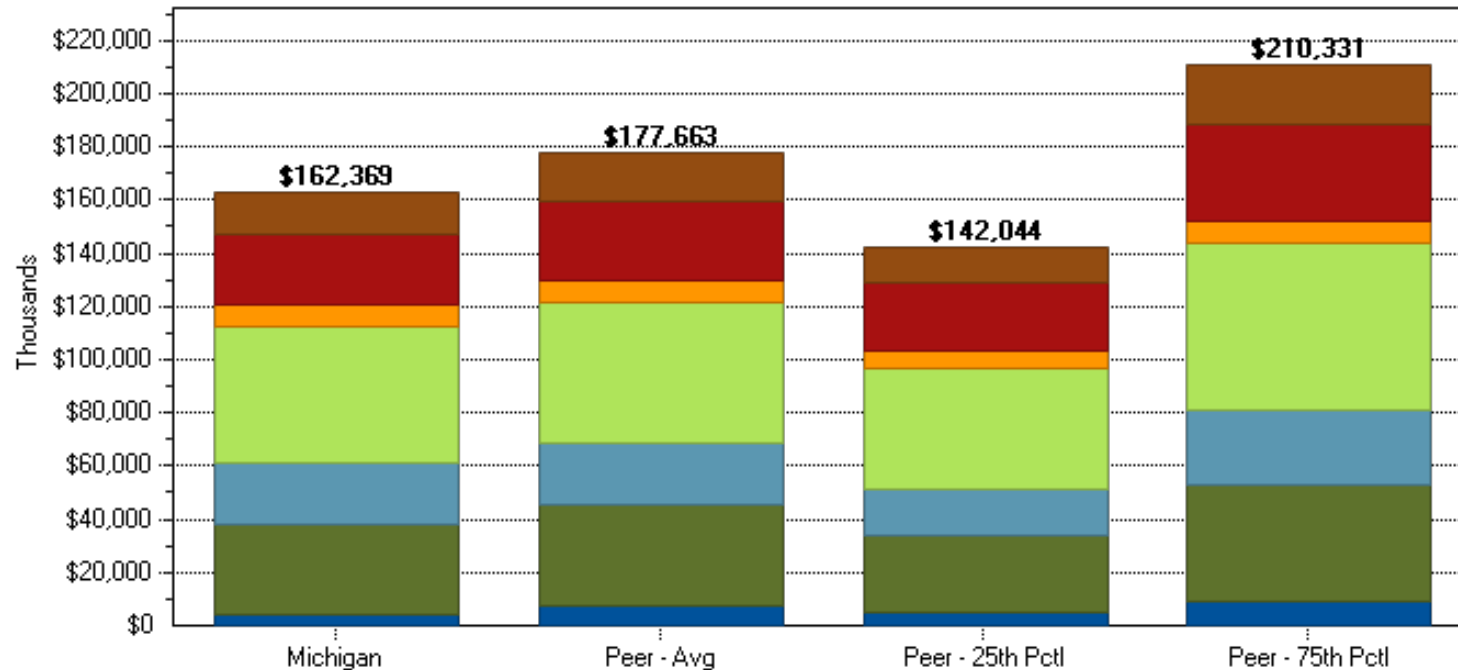
Baseline Assessment

Infrastructure Benchmark Key Takeaways (Cont'd)

- The State of Michigan spends \$15M less than the peer group. Spending is lower than the peer group in all functional areas. Drivers of the variance include:
 - Lower spending in hardware, personnel, transmission and occupancy.
- Michigan spends more than the peer group in the software category.
 - Areas of higher spending include Help Desk, Unix, Internet and Storage. Wintel server software is lower than the peer group.
- Total staffing is lower than the peer group, with Michigan at 616 and the peer group at 626.
 - Michigan utilizes fewer FTEs in some areas, for example Client and Peripheral, Unix and Data Networking, but more FTEs than the peer group in Wintel and Voice.
 - The cost per FTE is lower at Michigan compared to the peer group.
 - Michigan and the peer group utilize a similar number of external staff resources. Michigan utilizes more contractors than the peer group, at 40 vs. 26.4, but the peer group uses more outsourcing, with 28 FTEs.
 - Per capita spending on contractors is generally higher at Michigan, with the exception of the Help Desk and Storage.

Baseline Assessment

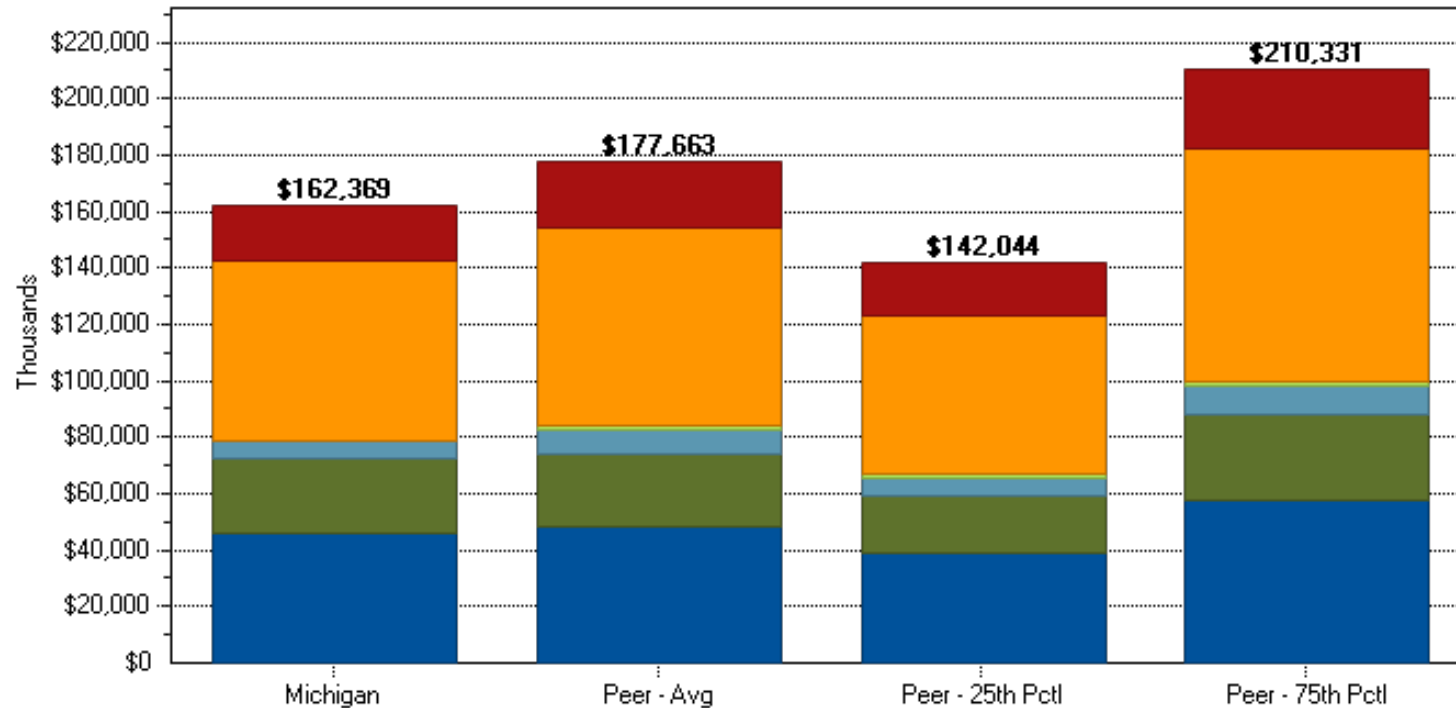
Infrastructure Benchmark: Total Spending by Functional Area



	Michigan	Peer - Avg	Peer - 25th Pctl	Peer - 75th Pctl
Mainframe	\$4,487	\$7,084	\$4,580	\$8,850
Servers - Unix and Wintel	\$33,740	\$38,169	\$28,931	\$43,814
Storage	\$22,657	\$23,507	\$18,078	\$28,242
Client & Peripherals	\$51,384	\$52,838	\$44,910	\$62,593
IT Help Desk	\$8,196	\$8,244	\$7,052	\$8,888
Data Networking	\$26,300	\$29,255	\$25,210	\$35,645
Voice Telecom	\$15,604	\$18,566	\$13,283	\$22,300

Baseline Assessment

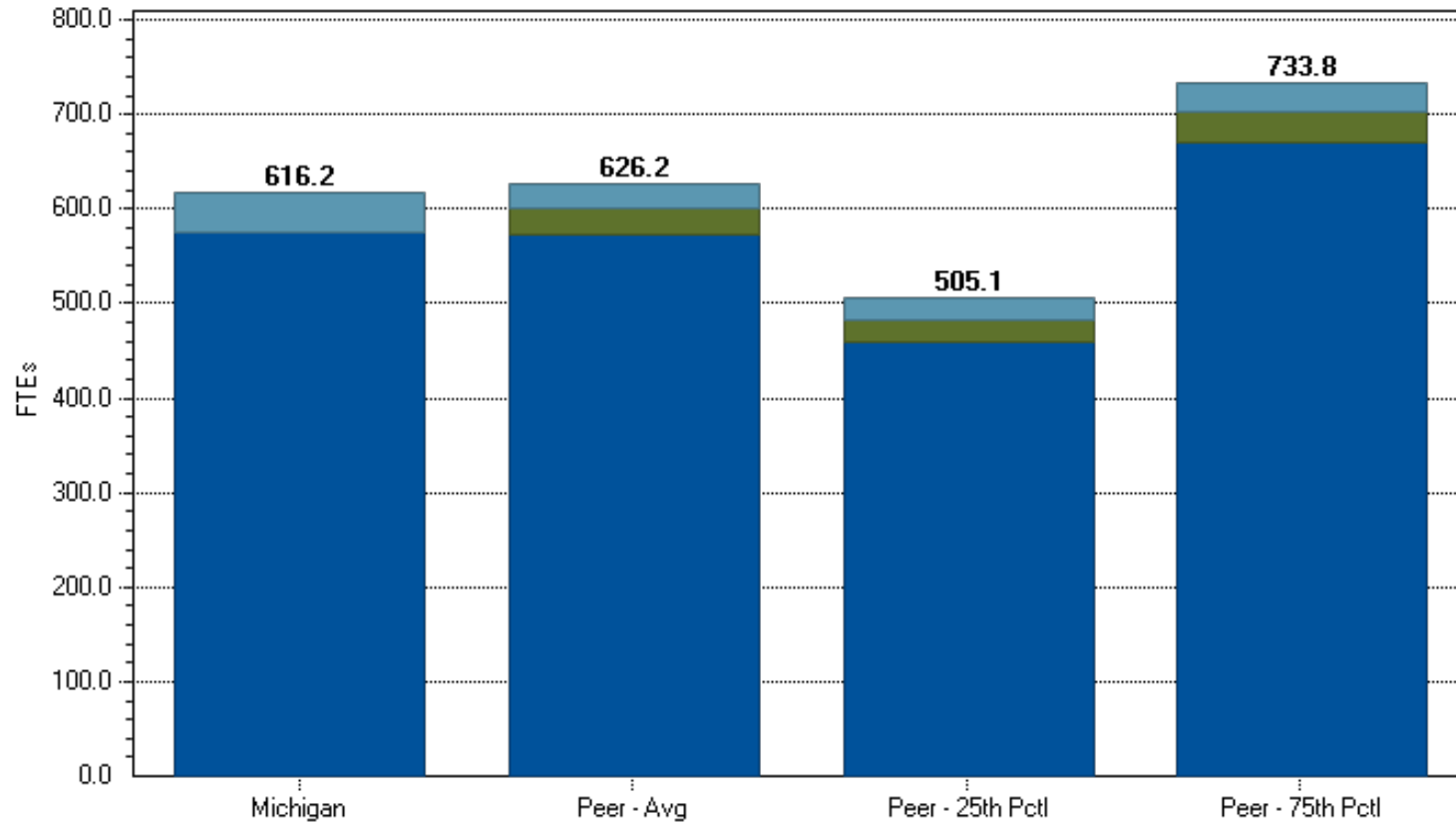
Infrastructure Benchmark: Total Spending by Cost Category



	Michigan	Peer - Avg	Peer - 25th Pctl	Peer - 75th Pctl
Hardware	\$45,733	\$48,594	\$39,258	\$57,838
Software	\$26,413	\$25,400	\$19,859	\$30,224
Occupancy	\$6,397	\$8,430	\$6,517	\$9,921
Disaster Recovery	\$0	\$1,548	\$1,180	\$1,847
Personnel	\$64,159	\$70,190	\$56,418	\$82,512
Transmission	\$19,667	\$23,500	\$18,812	\$27,989

Baseline Assessment

Infrastructure Benchmark: IT Head Count (FTE), by Source



	Michigan	Peer - Avg	Peer - 25th Pctl	Peer - 75th Pctl
Insourced	575.3	571.8	459.4	670.5
Outsource Equivalent	0.9	28.0	23.7	32.7
Contractor	40.0	26.4	22.0	30.6

Baseline Assessment

Applications Benchmark Key Takeaways

- State of Michigan IT spends \$143.4M to sustain its 1,700+ applications — a figure that closely aligns with peers in the 75th percentile (high cost).
 - State of Michigan indicates a high technical complexity which supports 14 DBMSs, 15 operating systems, 55 computer languages and 150+ support tools. While there are plans to sunset/retire and modernize a number of applications, continued support adds substantial cost to Michigan.
 - Lawson HRMN (medium customization) was the only ERP which indicated low cost compared with peers. Heavy customization, integration to packages and defect repair will often account for higher costs. Consequently, ORACLE e-Business, SIEBEL CRM and SAP PSCD (MIITAS) are highly customized packages, which leads to higher costs to support.
 - Software COTS/ERPs Package costs are high for a number of applications.
- State of Michigan cost efficiency for applications, at \$85 per Function Point, is similar to the peer 75th percentile, at \$86 per FP. The Gartner Database Average is \$56 per FP and the Public-Sector Peer average is \$74 per FP, which is often attributed to regulatory support.
- Total Spend for personnel is less than the peer average, primarily driven by fewer business analysts.
 - State of Michigan total staffing, at 787.1 FTEs, is 17% less than the peer average of 950.1 FTEs.
 - State of Michigan supplemental workforce represents 41%, compared with the peer at 26% (319.1 FTEs compared with 248.3 FTEs for the peer).
 - Cost per FTE is higher, at \$132K vs. \$109K for the peer, and is driven by heavy use of high-priced contractor staff.

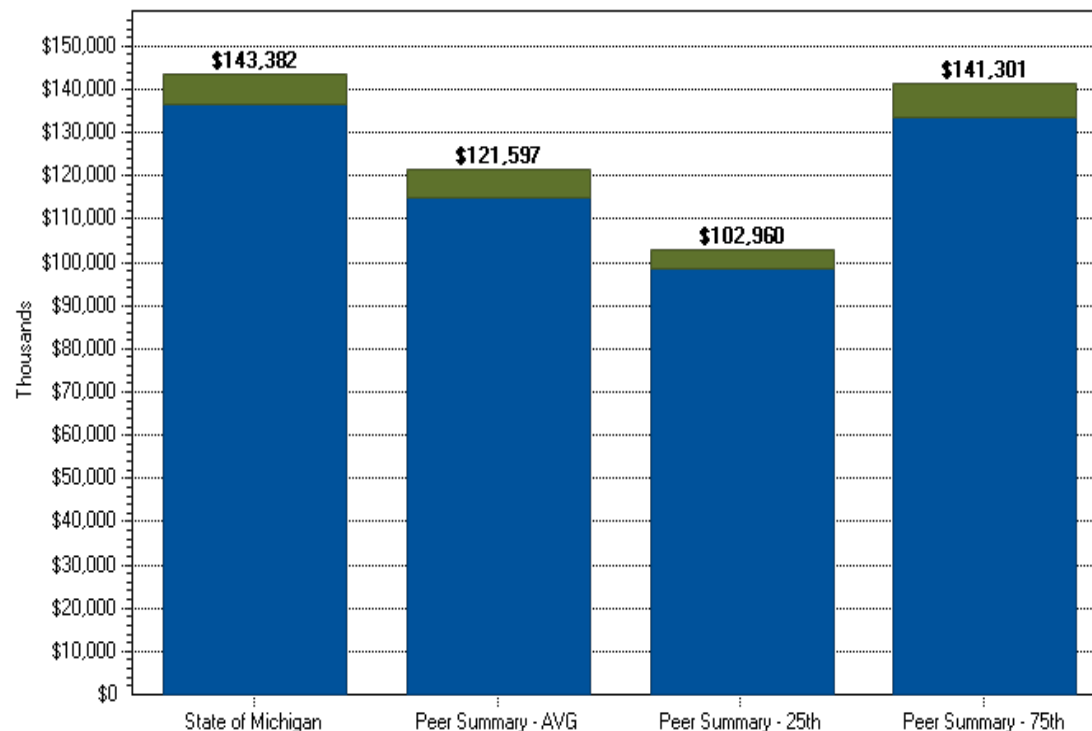
Bottom Line: Application support costs are high compared to peers, but efficiency is in line with public sector organizations. However, total spend on personnel is less than peers, primarily due to fewer business analysts, despite heavy use of high-priced contractor staff.

Baseline Assessment

Applications Benchmark: Total Spending

- State of Michigan spend for Applications Sustainment, at \$143.4M, is within range of the peer 75th percentile.
- State of Michigan IT spend for Non-ERP aligns closest with the peer 75th percentile, while spend for ERP applications is almost the same as the peer average.

Spend by Functional Area



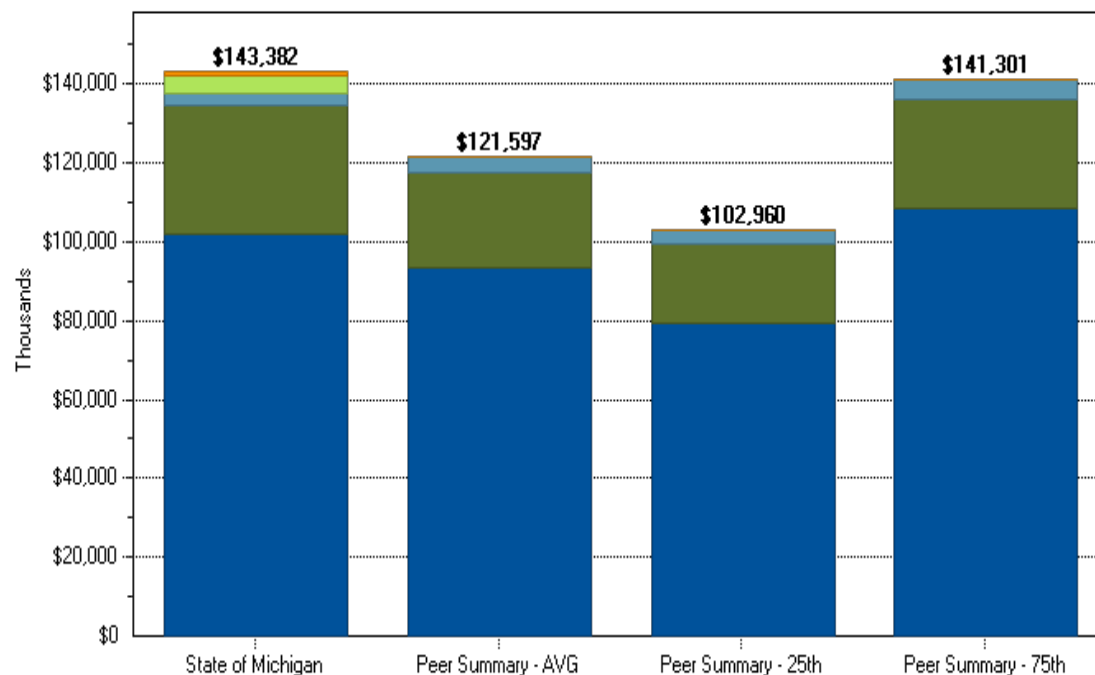
	State of Michigan	Peer Summary - AVG	Peer Summary - 25th	Peer Summary - 75th
Application Support	\$136,744	\$115,017	\$98,587	\$133,427
Application Support - ERP	\$6,639	\$6,580	\$4,373	\$7,874

Baseline Assessment

Applications Benchmark: Total Spending by Cost Category

- Personnel cost is 6% less than the peer average (\$6.3M) for Applications Sustainment.
- Software costs are significantly higher than the peer average and align more with the peer 75th percentile.
- Occupancy cost is less than the peer organizations, as there are fewer IT resources.
- Unallocated Total Cost represents fixed-price costs for outsource work, while Unallocated Non-Personnel are significantly higher than the peer organizations.

Spend by Cost Category



	State of Michigan	Peer Summary - AVG	Peer Summary - 25th	Peer Summary - 75th
Personnel	\$101,790	\$93,268	\$79,258	\$108,343
Software	\$33,017	\$24,067	\$20,089	\$28,006
Occupancy	\$2,993	\$4,262	\$3,613	\$4,952
Unallocated Non-Personnel	\$4,191	\$0	\$0	\$0
Unallocated Total	\$1,392	\$0	\$0	\$0

Baseline Assessment

Skills Inventory Key Takeaways

- With 38% of critical skills at “Advanced” or “Master” levels, DTMB indicates an above-average overall skill maturity level. As a rule of thumb, an IT organization should have 30% of critical skills at these levels.
- IT staff is stronger in competencies associated with performing IT work and weaker in competencies associated with business alignment and customer interaction.
- Current DTMB titles are not meaningful, and job titles do not describe what people do.
- DTMB has lower staffing levels in Client and Peripheral Support, Voice Network and Data Network as compared to Gartner’s IT Key Metrics Data for State and Local Governments.
- There is no clear explanation of why Desktop Support numbers are lower in the DTMB survey. People may have misclassified themselves, or the people who did not take survey tended to be desktop support personnel.
- DTMB shows the highest level of capabilities in Desktop Support and most infrastructure job families. Individuals in Relationship Management and Project Management show the lowest capability relative to other job families.
- There exists significant “bench strength” across DTMB. Individuals in different job families have many skills needed to perform other roles. DTMB should identify these individuals as part of their sourcing strategy and succession planning.

Bottom Line: In aggregate, DTMB exhibits high skill levels but is lacking in some key areas such as relationship management, and job titles do not align with actual duties. In addition, there is significant “bench strength” within DTMB that can be tapped to fill key roles.

Baseline Assessment

Skills Inventory: Overall Skills

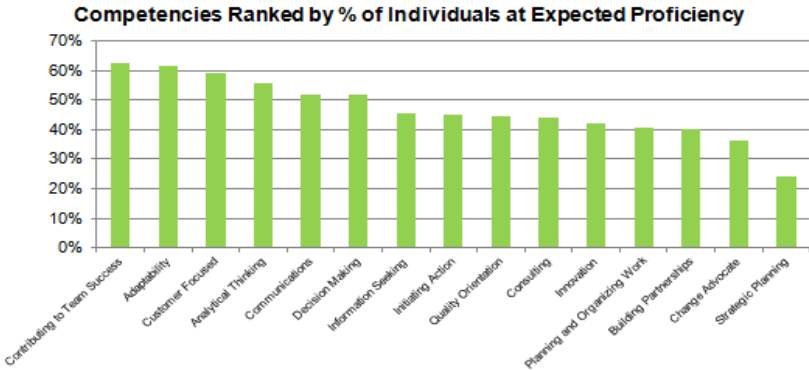
- DTMB’s skill proficiency levels are higher than Gartner’s industry benchmark data.
- As a rule of thumb, an IT organization should have 30% of critical skills at “Advanced” or “Master” levels. DTMB is at 38%, which **indicates an above-average overall skill maturity level**.

Industry Benchmark Skill Proficiency Comparison

% of Skills at Each Proficiency Level

	Limited	Basic	Intermediate	Advanced	Master
DTMB	6%	19%	37%	31%	7%
Public	8%	23%	35%	29%	6%
Private	7%	23%	38%	28%	5%

- IT staff stronger in competencies associated with performing IT work and weaker in competencies associated with business alignment.



Baseline Assessment

Skills Inventory: Staffing Levels

- Job Family information, as collected by the survey, show that DTMB's job role distribution is typical to industry, but the Desktop Support job family counts appear low.
- Current DTMB titles are not meaningful in that job titles do not accurately describe what people do.
- DTMB has lower staffing levels in Client and Peripheral Support, Voice Network and Data Network as compared to Gartner's IT Key Metrics Data for State and Local Governments.
 - Lower percentage in Voice and Data Network is the result of the State outsourcing network and telecommunications services.
- There is no clear explanation of why Desktop Support numbers are lower in the DTMB survey. People may have misclassified themselves, or the people who did not take the survey tended to be desktop support personnel.

Technical Domain	DTMB Job Families in Skills Inventory (IT Leadership Distributed Across all Job Families)	IT Key Metrics Staffing Distribution	State of Michigan Staffing Distribution
Data Center	Computer Operations, Release Management, Quality Assurance, Systems Administration, Database Administration, Web Administration	16%	21.2%
Client and Peripheral Support	Client Technology/Desktop Support	14%	8.9%
Voice Network	Telecommunications	7%	4.2%
Data Network	Network Management	10%	2.9%
IT Help Desk	Customer Support/Help Desk	10%	7.9%
Applications	Application Development, Business Analysis, Business Intelligence, Database Analysis, Web Design	29%	35.7%
IT Management	Architecture, Business Continuation, IT Security, Project Management, Relationship Management	14%	19.2%

Baseline Assessment

Skills Inventory: Capabilities

- DTMB shows the highest level of capabilities in Desktop Support and most infrastructure job families.
- Individuals currently in Relationship Management show the lowest capability relative to the other job families. The low marks for Relationship Management probably reflect the newness of the role.
- To quantify the current capabilities of DTMB, a qualification score (“Q score”) was calculated for all 1,363 participants. The Q score is based on a combination of an individual’s proficiency in the five competencies and 10 foundational skills associated with the different job families.

Job Family	Highly Qualified	Qualified	Less-Qualified	Total HC	Strength (% HQ+Q)	Rank
Client Technology/Desktop Support	31	38	32	101	68%	High
Web Administration	4	3	5	12	58%	
Quality Assurance	7	4	10	21	52%	
Systems Administration	25	14	43	82	48%	
Application Development	48	78	163	289	44%	
Network Management	6	7	19	32	41%	
Database Analysis	2	3	8	13	38%	Med
Database Administration	14	7	35	56	38%	
Web Design	5	8	22	35	37%	
TeleCommunications	7	8	32	47	32%	
IT Security	2	5	15	22	32%	
Business Analysis	3	13	37	53	30%	
Architecture	3	6	22	31	29%	Low
Business Intelligence	1	3	10	14	29%	
Project Management	12	16	80	108	26%	
Customer Support/Help Desk	4	19	66	89	26%	
Computer Operations	1	12	46	59	22%	
IT Leadership	10	17	96	123	22%	
Business Continuity	1	0	4	5	20%	
Release Management	1	1	8	10	20%	
Relationship Management	2	1	38	41	7%	

Baseline Assessment

Skills Inventory: "Bench Strength"

- There exists significant "bench strength" across DTMB. Individuals in different job families have many of the skills to perform other roles.
- Each individual was evaluated for all 21 job functions. Table shows the number of FTEs who are in a different role but have strong capabilities in the different job families.
- Because of the need to ensure anonymity, managers did not validate the survey response. DTMB will need to validate skills and identify suitable roles through its regular employee performance management practices.

Highly Qualified and Qualified FTEs currently in Different Job Families

Job Family	High Qualified	Qualified	Total
Application Development	43	122	165
Architecture	21	71	92
Business Analysis	37	123	160
Business Continuation	11	50	61
Business Intelligence	29	81	110
Client Technology / Desktop Support	67	144	211
Computer Operations	34	125	159
Customer Support / Help Desk	42	132	174
Database Administration	22	64	86
Database Analysis	44	65	109
IT Leadership	17	66	83
IT Security	20	79	99
Network Management	13	62	75
Project Management	25	87	112
Quality Assurance	49	93	142
Relationship Management	15	48	63
Release Management	23	79	102
Systems Administration	48	107	155
TeleCommunications	22	71	93
Web Administration	25	51	76
Web Design	30	84	114

Baseline Assessment

IT Business Effectiveness Survey Key Takeaways

- Gartner also conducted an IT Business Effectiveness Survey to gauge the priorities and perceptions of current customers.
- There are several criteria of high importance to customers that, if addressed, could provide significantly increased alignment and effectiveness.
 - Bottom Line — Cost, Service Quality and System Integration are primary targets for improvement.
- Key areas such as Project Management, Contract Management and Leadership/Innovation were rated as lowest importance by customers.
 - Bottom Line — Some core DTMB functions are not viewed as valuable by customers, but are critical to delivering high-quality, cost-effective services to customers.
- While only 16% of customers viewed the IT relationship as a partnership, and more than 2/3 are not aware of IT's goals and strategies, customers feel their dependence on IT will increase in the future.
 - Bottom Line — DTMB's strategic goals are either misaligned to or misunderstood by customer agencies, resulting in a large opportunity for DTMB to improve strategic alignment.
- Approximately 71% of customers said they have SLAs, but only 66% of that group know what they are, and only 10% say they meet needs.
 - Bottom Line — Roughly 7% of DTMB customers believe that current SLAs meet their needs.



Customer Quote: “A lot of SLA performance reports will have N/A in place of an actual metrics report. That is unacceptable.”

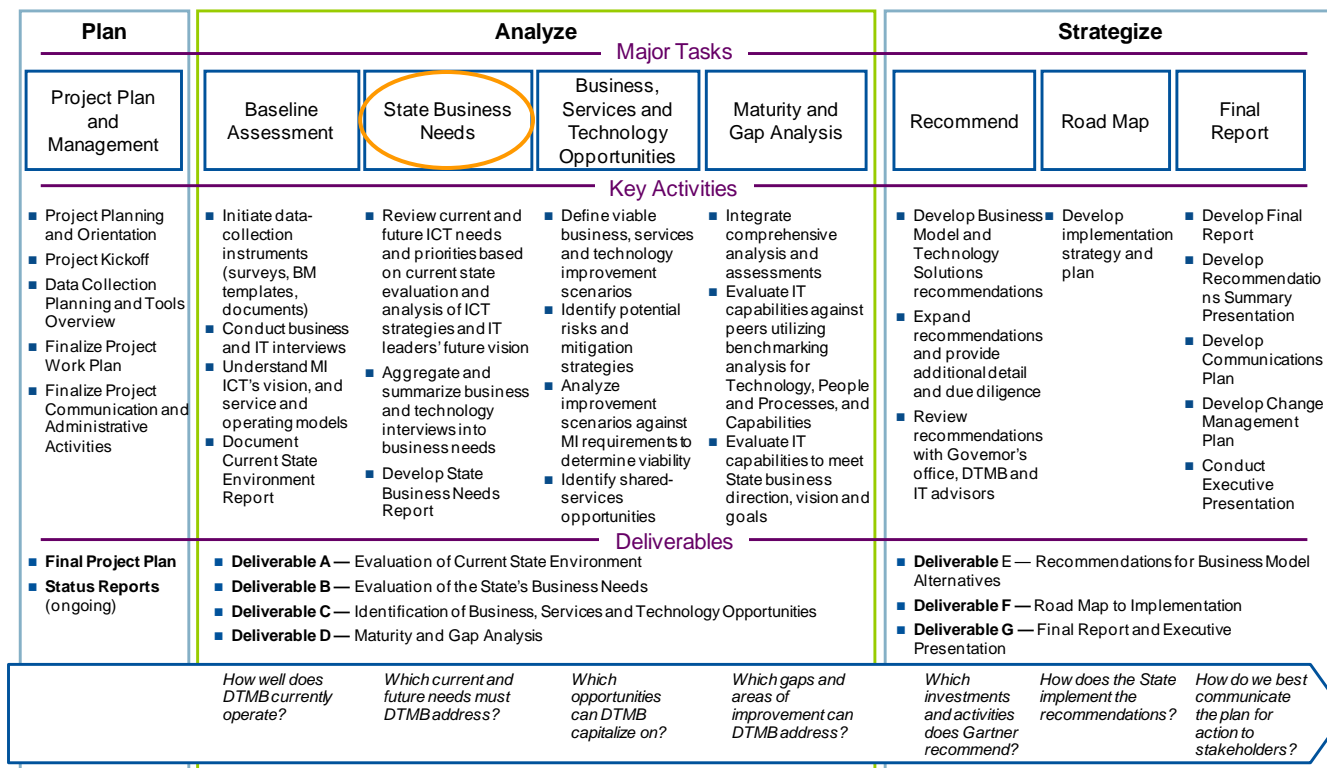
Appendix B

Deliverable B — Needs Assessment Summary

Needs Assessment

Gartner Approach

- Complementing the baseline assessment was an analysis of the State's business needs that would help define the target state for DTMB.



Needs Assessment

Background and Overview

- The State of Michigan partnered with Gartner to ensure alignment of its ICT assets, business model, operations and strategy with current and future needs.
- To achieve this goal, understanding the needs of the current and potential customer base to realize opportunities for new or improved services, alternative ways to operate, and other methods of evolving and improving DTMB, is critical to the success of the effort.
- In order to expeditiously gather information on key needs, Gartner executed two major threads of activity to obtain customer feedback on needs and priorities:
 - A series of interviews with each State of Michigan agency, representative counties, and the DTMB liaisons who interact with customers (i.e., IOs, CSDs)
 - An IT Business Effectiveness (ITBE) survey to understand the agencies' perspective on the business effectiveness of IT services
- Gartner subsequently sorted the opportunities into four categories to help the State prioritize future efforts to serve its customer base:
 - **Statewide** — The Governor's statewide aspirations and goals
 - **Shared** — The majority of agencies communicated this need
 - **Agency-Specific** — One or a few agencies communicated this need
 - **Local Government** — The local governments communicated this need

Needs Assessment

Background and Overview (Cont'd)

- The needs are intended to capture higher-level areas of interest that DTMB can potentially pursue as future shared services or other technology solutions. This initial view of customer needs will inform the subsequent deliverables for this engagement, most notably the opportunities, gap analysis and recommendations aspects of the study.
- The needs that were gathered cover a number of areas, but are important to understanding the customer, given these were “top-of-mind” contributions during interviews.
- In an effort to qualify the agency-specific needs to help extrapolate into broader areas of focus in the future, each specific need is preceded by a category (e.g., Social Media Strategy).
- In addition to identifying and describing key needs, Gartner included summary and detailed Information Technology Business Effectiveness (ITBE) survey results, which highlight key customer perspectives on DTMB performance and which IT services are most valued.
- Gartner also developed customer profiles for each State agency that notes key initiatives and priorities, as well as a SWOT analysis that will help DTMB manage these accounts going forward.

Needs Assessment

Emerging Opportunities Based on Needs Assessment

- Collectively, the Needs Assessment and ITBE Survey results highlighted important customer perceptions of DTMB, identified which IT services are most valued by customers, and unearthed specific technology needs that could lead to additional shared services and solutions. Based on this information, a number of emerging opportunities begin to take shape:
 - Improve customer alignment and satisfaction through increased engagement at the strategic level and during solution design and definition.
 - Streamline and augment service offerings that communicate business value to current and future customers, such as local government entities.
 - Innovate with mobility and self-service technology solutions.
 - Design cost-effective solutions that can be flexibly sized to customer needs.
 - Organize around a more effective customer interaction model and source skill sets that are important to its customers.
 - Obtain favorable technology pricing that can be utilized by all customers, and offer a transparent, efficient procurement process for its customers.
 - Strive for consolidation and asset-sharing opportunities to lower the cost of IT and increase support.
- The subsequent slides elaborate on the specific findings that support the above high-impact opportunity areas for DTMB, beginning with key overall findings.

Needs Assessment

Key Findings

- **Service Delivery Issues** — Going into the agency interviews, Gartner expected the discussions to focus on how DTMB could partner with the agencies to further enable the fulfillment of their missions and to achieve greater business efficiencies, but the focus of the discussions primarily focused on service delivery issues, which emphasized the agencies' desire for improved service.
 - Bottom Line — Although several agencies acknowledged the efforts of the current CIO to improve service delivery, DTMB must continue to address the agency perception that it is not customer-service-oriented and must identify the root causes of customer dissatisfaction.
- **Low Perceived Customer Value of IT Services** — The complexity of customer invoices, the lack of an IT performance metrics dashboard, and the perceived lack of accountability for service have led to feelings of high costs and low value for DTMB services.
 - Bottom Line — DTMB must communicate the business value of its services.
- **Lack of Project Orientation** — Some agencies do not know the status of their current projects and view these investments as never-ending.
 - Bottom Line — DTMB must improve its project communications. This includes working with agencies during project definition, project prioritization, project change management and ongoing project status reporting.

Needs Assessment

Key Findings (Cont'd)

- **Misalignment with Strategic Priorities** — Agency responses varied significantly when asked if DTMB was involved with their strategic planning activities. In some instances, the IO is “at the table” for strategic discussions, while in other instances the IO role and function performed for the agency are not understood.
 - Bottom Line — Although the concept of a dedicated project liaison is a good initial step to developing partnerships with the agencies, the majority of IOs are currently performing in operational roles and are not viewed as strategic partners.
- **Opportunity to Expand Services to Local Entities** — Localities are interested in partnering with DTMB as long as services are cost-effective and they are involved in the requirements definition process.
 - Bottom Line — DTMB has opportunities to provide additional services to local entities.

Needs Assessment

Statewide Needs

- Gartner started with Governor Snyder’s primary tenets for reinventing the State of Michigan to understand DTMB’s potential role for meeting these needs.

Governor Snyder’s Plan for Reinventing Michigan

- | |
|--|
| 1. Create more and better jobs |
| 2. Leverage our new tax system |
| 3. Reinvent Our Government |
| 4. Keep our youth — our future — here |
| 5. Restore our cities |
| 6. Enhance our national and international image |
| 7. Protect our environment |
| 8. Revitalize our educational system |
| 9. Reinvent our healthcare system |
| 10. Winning in Michigan through Relentless Positive Action |
-

Needs Assessment

Shared Needs

- During data-gathering activities, Gartner aimed to identify shared agency needs that represent major opportunities for DTMB on which to capitalize when determining its future direction and service catalog.
- Shared needs are defined as services, processes, systems and other capabilities that the majority of agencies communicated as required or desired.
- Some of the key shared needs identified by Gartner include:
 - Technology partners who understand their business and can proactively provide high-value technology solutions
 - A service catalog that is defined by benefits delivered to the business, instead of IT components
 - Invoices that can be easily understood regarding the services provided and the associated costs
 - Citizen and business-facing applications to provide customers greater access to services, as well as internal applications to allow for mobile workforce enablement
 - More project managers and project tracking, and projects to be completely delivered on schedule and within defined budgets
 - Performance dashboards for each agency
 - Expedited mobile provisioning to provide mobile and tablet devices for mobile workforce enablement
 - Quickly evolving technical architecture standards to keep pace with agency business needs
 - Clarity on status to complete a procurement, and appropriate controls to enforce contract terms with vendors
 - Security standards that protect enterprise security interests, but flexible enough for agencies to realize their business objectives.

Needs Assessment

Agency-Specific Needs

- Gartner also identified needs that were related to one or several agencies, which represent major opportunities for DTMB to improve or expand its service delivery to further help its customers. Primary need areas include:
 - **Social Media Strategy** — Three agencies communicated a need for developing a social media strategy and/or approach for agencies to follow.
 - **Content Management** — Three agencies expressed a desire to redesign the content management and website design for their agency sites in an effort to make them look more professional.
 - **Major System Upgrades** — The Department of Community Health has a \$100M Medicaid upgrade in the works. The Department of Agriculture is looking to replace the legacy system around its licensing solution and is working with LARA and other agencies that have licensing responsibilities.
 - **Consolidation** — Michigan State Police is focused on its Regional Policing Plan initiative, which will reduce brick-and-mortar locations by 35. Given current economic conditions, other agencies may follow.
 - **Self-Service Applications** — The Department of Human Services is instituting a self-service phase to its BRIDGES initiative in an effort to reduce caseloads for social workers.
 - **Mobile Applications** — Michigan.gov has begun an initiative to migrate the most popular content to mobile applications, and is an example of demand expressed by agencies.
 - **Health Insurance Exchange** — LARA, in an effort with the Department of Community Health, has the “MiHealth Marketplace” on the horizon. This portal will be used for purchasing health insurance and monitoring benefits.
 - **Predictive Analytics** — The Department of Human Services stated a need for a predictive analytics capability to perform “what if?” analyses against historical information. This type of functionality could help all agencies.
 - **Integration** — Three agencies expressed a need for better data integration capabilities with the federal government for environmental data, healthcare-related data, etc.

Needs Assessment

Local Government Needs

- Finally, Gartner also identified needs expressed by local government representatives, which could help DTMB extend its footprint to additional outside partnerships. Primary need areas include:
 - **Mobile Applications** — All localities expressed interest in mobile application development and mobile device management from DTMB, in particular with State agencies that have counterparts in their localities.
 - **Volume Pricing** — All localities are interested in leveraging software and hardware purchasing where possible, but localities are not confident that DTMB can get them better pricing.
 - **GIS Solutions** — Several localities are pleased with existing GIS services being provided, and would like to expand the GIS program where practical.
 - **Cloud Computing** — Larger localities generally do not feel the need for outsourcing to DTMB their existing applications or infrastructure, but they are interested in sharing more-advanced technologies such as cloud computing.
 - **Requirements Definition Process** — Smaller localities reported a need to be included in the requirements development process for applications the State wants to provide.
 - **Outsourcing Opportunities** — Smaller localities are interested in outsourcing any portion (and in fact all) of their infrastructure (including data centers) that DTMB can demonstrate would be cheaper for them than what they are spending now.

Needs Assessment

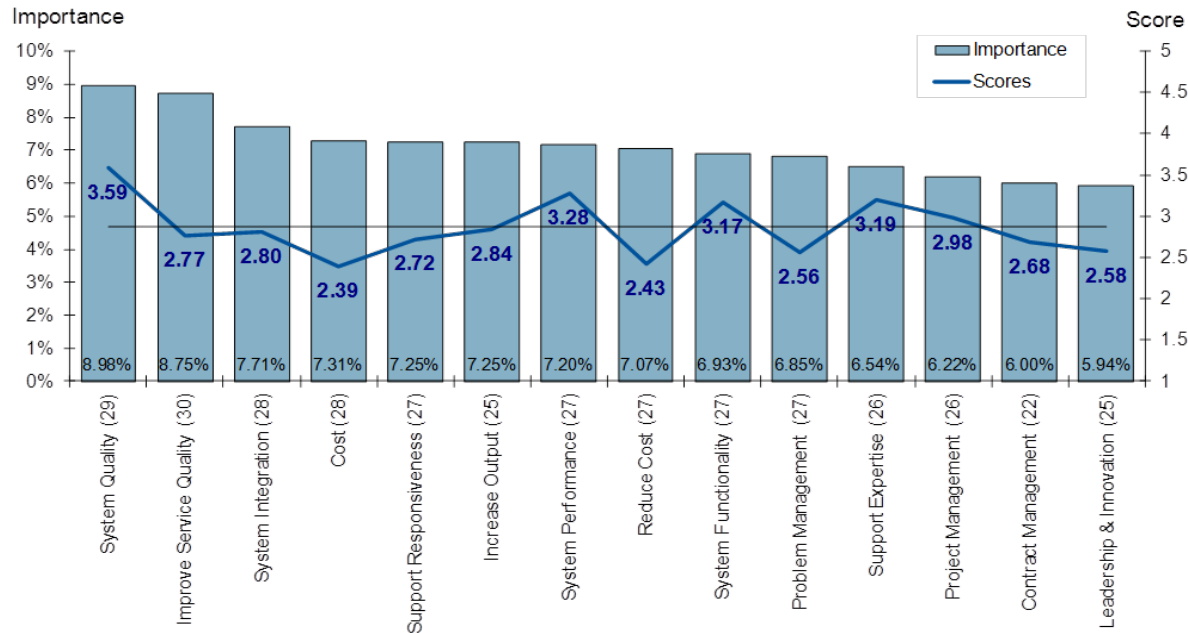
ITBE Survey Results

- As noted earlier, the Information Technology Business Effectiveness Survey is a tool that helps organizations such as DTMB gauge what is important to its customer base, and how the organization is performing in providing IT services to its customers.
- Gartner distributed the survey to each of the 19 agencies, and a total of 31 respondents rated the standard ITBE criteria.
- The results of the ITBE Survey revealed insightful information on customer perceptions of DTMB and unearthed many areas of opportunity for DTMB, including customer priorities. DTMB was rated highly for infrastructure and operations services, which corresponds with the maturity of these services and improvements made during the last five to 10 years.
- On the other hand, customers expressed the least satisfaction with cost, leadership and innovation aspects of IT, which provides DTMB with keen insight on areas of improvement it can focus on in the future. The figure on the next slide shows the customer responses for importance of and satisfaction with DTMB services.

Needs Assessment

ITBE Survey Results (Cont'd)

- Based on the ITBE results, the following graph illustrates IT service elements in order of importance to the customer, as well as individual customer satisfaction scores expressing how well DTMB currently delivers these elements.
- The straight black line is the average satisfaction score for DTMB (2.87), which indicates there is significant room for improvement related to customer satisfaction with DTMB services.



Needs Assessment

ITBE Survey Results (Cont'd)

- While only 16% of customers viewed the IT relationship as a partnership, and more than two-thirds are not aware of IT's goals and strategies, customers feel their dependence on IT will increase in the future.
 - Bottom Line — DTMB's strategic goals are either misaligned to or misunderstood by customer agencies, resulting in a large opportunity for DTMB to improve strategic alignment.
- Approximately 71% of customers said they have SLAs, but only 55% of that group know what they are, and only 48% say they meet needs.
 - Bottom Line — Roughly one-third of DTMB customers believe that current SLAs meet their needs.
- There are several criteria of high importance to customers that, if addressed, could provide significantly increased alignment and effectiveness.
 - Bottom Line — Cost, Service Quality and System Integration are primary targets for improvement.
- Key areas such as Project Management, Contract Management and Leadership/Innovation were rated as being of lowest importance by customers.
 - Bottom Line — Some core DTMB functions are not viewed as valuable by customers, but are critical to delivering high-quality, cost-effective services to customers.

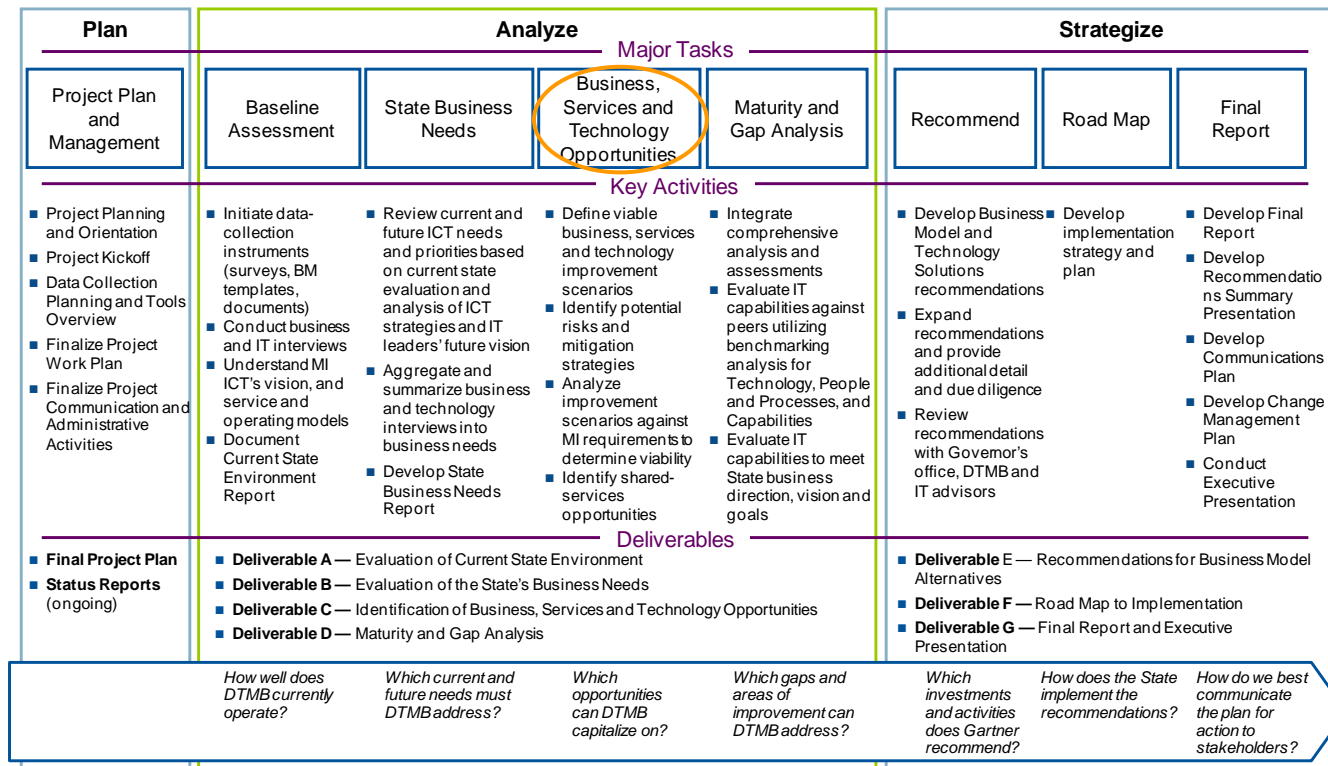
Appendix C

Deliverable C — Business, Services and Technology Opportunities Summary

Business, Services and Technology Opportunities

Gartner Approach

- Other major inputs into the recommendations and road map were the business, services and technology opportunities, as identified through customer input and industry trends.



Business, Services and Technology Opportunities

Background and Overview

- In order to define potential improvement scenarios for DTMB, the Gartner team examined environmental factors such as transformation drivers and enablers, DTMB's strategic advantages, and improvement opportunities resulting from understanding the current ICT services.
 - The Gartner team leveraged Gartner Research to identify several **transformation drivers** — external societal, technology and industry trends — that will impact DTMB and its customers.
 - Gartner used the information gathered from executive interviews, the Current-State Analysis and the Gap Analysis to identify **transformation enablers** — DTMB strategic and internal improvement opportunities — that will help DTMB to realize its strategic vision.
 - Gartner identified strategic elements that DTMB can use to facilitate achieving the desired goals
- Based on the environmental factors, Gartner identified IT implications to define the capabilities that DTMB must have in order to take advantage of the environment. The scenarios are based on diverging approaches that DTMB may take in order to achieve the selected capabilities.

Business, Services and Technology Opportunities

Transformation Drivers: Societal Trends and Implications for the State of Michigan

Effective response to these trends...

- Use of the Internet to conduct business transactions is increasing significantly.
- Adoption of mobile devices is expected to continue to increase.
- Business use of social networking is becoming pervasive and persistent in the work environment.
- Multiple mobile computing platforms are the norm.
- Consumer Internet experience will drive expectations for the workplace.
- Individuals will conduct more business using personal devices.

...requires DTMB initiatives that:

- Provide customer, constituent and employee access to government services that leverage the availability of the Internet.
- Provide services that can be deployed to multiple computing platforms.
- Improve agility to respond to a changing technology environment.
- Provide solutions that have the “look and feel” of other solutions that have become widely available and consumer-oriented.

Business, Services and Technology Opportunities

Transformation Drivers: Public-Sector Trends and Implications for the State of Michigan

Effective response to these trends...

- Continued economic pressure and tight budgets at the state levels, local governments and education.
- Establishment of multi-jurisdictional government services to provide economies of scale.
- Plan for and integrate key technologies that:
 - Increase public/private partnerships to provide IT services
 - Support seamless socialization
 - Support commoditization and open standards
 - Support an information continuum
 - Support employee centricity
 - Enable confluence of information, operational and consumer technologies.

...requires DTMB initiatives that enable:

- Effective, multi-layer and multi-jurisdictional governance and service management.
- Effective performance-oriented service management approaches.
- Aggressive deployment of services through the Internet and mobile platform devices for all constituents and audiences.
- Enterprise information management and governance.
- Enterprise technology and operating standards, processes and tools.

Business, Services and Technology Opportunities

Transformation Drivers: Government- and Program-Specific Trends and Implications for the State

Effective response to these trends...

- Aging legacy systems enabling federal program (i.e., MMIS, HHS, etc.) are being replaced, and require significant new capabilities to be sustained by the states.
- Enterprise information management capabilities are being required in all major federal program areas that are run by states — Human Services, Education, Homeland Security (public safety).
- Consumerization trends will continue to drive changes in the way that governmental agencies interact with constituents and the populations being served.
- A broad range of domain-specific technologies may be deployed by programs to achieve their domain-specific needs.

...requires DTMB initiatives that enable:

- Significantly enhanced project and program management and vendor management capabilities to effectively manage the delivery of modern, integrated solutions.
- Enhanced enterprise information management capabilities in DTMB and in program areas and agencies.
- Aggressively driving solutions and DTMB services to more-consumer-friendly platforms for all constituents.
- Enterprise standards that allow for an ever-widening array of domain-specific technologies to be deployed.

Business, Services and Technology Opportunities

Transformation Drivers: Security Trends and Implications for the State of Michigan

Effective response to these trends...

- Increasing frequency and viciousness of security attacks.
- Robust security requirements for access, storage and transmission of sensitive data become the minimum.
- Increasing drive for transparency, privacy and de-identification.

...requires DTMB initiatives that enable:

- Aggressive approaches required to monitor and secure systems and networks.
- Established ability to rapidly identify and mitigate new security risks.
- Ability to tailor the security mitigation to the vulnerabilities of the asset being protected.
- Established baseline security requirements across all agencies — likely to include key elements of standards such as HIPAA, PCI, etc.
- Enhanced security capabilities to meet the needs of certain government communities or assets.
- Capability to monitor and enforce compliance with standards.

Business, Services and Technology Opportunities

Transformation Enablers: Strategic Advantage

- State leadership is emphasizing IT as business enabler...and differentiator:
 - Recently elected Governor has a thorough understanding of how IT can lead to significant transformation, and is a sponsor of this transformation initiative
 - Governor has emphasized transparency and performance management, leading to agency transformation
- All IT functions are already consolidated under DTMB.
 - DTMB has centralized all infrastructure services and aggregated all applications activities into a single organization
 - Most states are currently grappling with how to do this, while the State of Michigan is learning to get the most from this
- DTMB possesses a technically proficient staff that has been recognized nationally for its innovative success.
 - From a skills perspective, DTMB seems to have advanced and proficient skills commensurate with or ahead of other public sector organizations
 - DTMB employees have high skill levels in roles that are not their current job — signaling there is an ability to reassign employees to align better with skills and job role needs
- Local governments are actively seeking IT cost-effective IT solutions and IT providers.
 - Dire economic straits that exist within local governments drive localities to seek options that would save costs and increase their capabilities

Business, Services and Technology Opportunities

DTMB Opportunities Summary

- During the assessment, Gartner identified 48 high-level opportunities for DTMB across the nine IT roles identified on the previous slide.
- To help inform the plan of action, each opportunity was evaluated across two dimensions:
 - **Speed of Benefits Realization** — Relative time required to realize the inherent benefits of the opportunity.
 - **Impact** — Relative impact that the opportunity would have on DTMB in terms of delivering high customer value to agencies and other partners, and/or impact that an opportunity would have on DTMB being able to fulfill its strategic objective of being a best-in-class IT service provider.
- Using the above dimensions, the opportunities were evaluated and assigned to one of four planning quadrants, which aided in prioritizing DTMB efforts going forward and developing the road map:
 - **Top Priorities** — Opportunities that have a shorter estimated time frame for implementation, while also delivering a high improvement impact. These are the opportunities that DTMB should emphasize and act upon immediately.
 - **Quick Wins** — Opportunities that have a shorter estimated time frame for implementation but have a moderate impact as compared to the Top Priorities. Quick Wins should also be pursued as soon as possible, but should not interfere with achievement of the Top Priorities.
 - **Key Investments** — Opportunities that have a significant improvement impact, but require a longer implementation time frame as compared to Top Priorities. DTMB should look to begin planning and investing in these opportunities now so that they can be realized subsequent to the Top Priorities.
 - **Future Improvements** — Opportunities that are longer-term in terms of implementation time, while also not offering the highest relative improvement impact. In terms of prioritization, DTMB should focus on these opportunities after implementing other identified opportunities.

Business, Services and Technology Opportunities

DTMB Opportunities Summary (Cont'd)

Speed of Benefits Realization	Faster	Quick Wins	Top Priorities
		<ul style="list-style-type: none">■ Position the IO as a Strategic Partner■ Engage Local Governments■ Clarify Services to Customer Agencies■ Leverage the Tools DTMB Already Owns■ Institutionalize Enterprisewide Reporting Tool■ Establish the Solution Architect Function■ Reinforce SUITE Methodology■ Conduct a Comprehensive Risk Assessment■ Improve Communications from EA to Stakeholders■ Conduct Security Training	<ul style="list-style-type: none">■ Address Agency Perception of DTMB's Business Value■ Establish Business Analyst Function■ Standardize Project Status Reporting■ Standardize Project Management Processes■ Establish Agency IT Strategic Planning Processes That Are Separate from the Call for Projects■ Realign EA to Report to an Executive-Level Function■ Implement Automated IT Operational Tools■ Consolidate IT Service Catalogs■ Measure Customer Satisfaction■ Improve Customer Metrics■ Establish and Communicate Standard Procurement Process■ Enable Procurement Automation
	Slower	Future Improvements	Key Investments
		<ul style="list-style-type: none">■ Explore Different Financial Management Practices■ Operationalize the Strategic Plan■ Become More Business Architecture-Driven■ Implement Predictive Analytics■ Build Enterprise Information Management (EIM) Capability■ Enhance Governance of BI/PM Activities■ Standardize Data Management Processes■ Continue to innovate Enterprise Architecture■ Address Vendor Risk■ Increase Scope of Vulnerability Management■ Incorporate Privacy Management■ Improve IT Process Maturity	<ul style="list-style-type: none">■ Improve Customer Service Satisfaction■ Establish Internal Governance■ Strengthen Application Portfolio Management■ Optimize Resources to Enable Resource Pooling across DTMB■ Align Organizational Reporting and Governance Structure■ Enhance Financial Management■ Increase Skill and Training for Project Management Roles■ Enable Citizen-Centric Government■ Establish Business Analyst Function■ Align EA with Industry Best Practices■ Increase Scope of EA Coverage■ More Closely Align Purchasing and Procurement Functions■ Improve Security Operations Center (SOC) Operations■ Enhance Data Security■ Incorporate Privacy Management
		Lower	Higher
Impact			

Business, Services and Technology Opportunities

Fundamental Change is Required to Transform IT Service Delivery

- There are many elements in the current environment that provide opportunities for transforming DTMB's ICT services:
 - Societal trends
 - Trends in public-sector and government program areas
 - Security trends.
- There are a host of areas for DTMB to improve, based on the Gartner assessment of:
 - CIO: Business Alignment and Effectiveness
 - CIO: Operations Management
 - Applications
 - Program and Portfolio Management
 - Business Intelligence and Performance Management
 - Enterprise Architecture
 - Infrastructure and Operations
 - IT Sourcing and Vendor Management
 - Security and Risk Management.

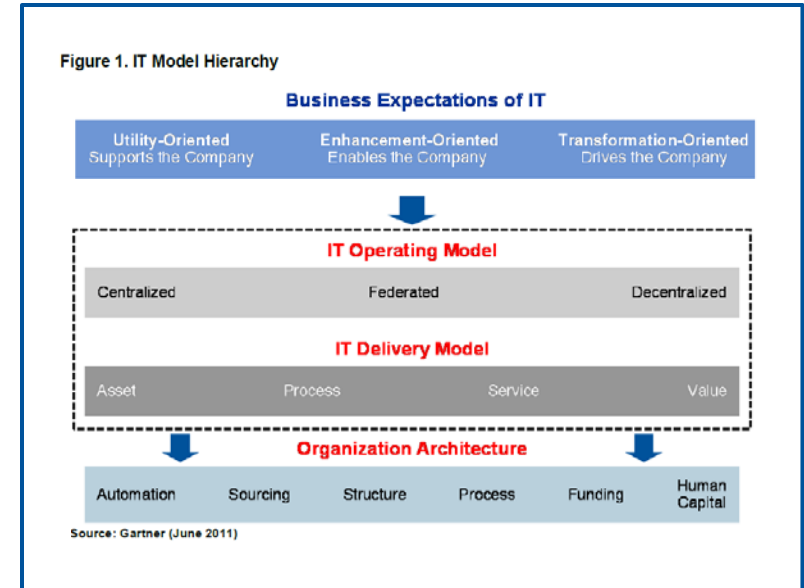
DTMB must radically rethink its IT delivery model to address the gaps identified and leverage the forces of change in the current environment to become the “IT Provider of Choice (not mandate).”

Strategic Advantages provide a strong foundation for the future capabilities.

Business, Services and Technology Opportunities

IT Delivery Model Hierarchy and Overview

- IT operating models are the result of certain implicit governance decisions that define and bind the IT spheres of influence. They help determine:
 - Where responsibility and authority for delivering different types of IT value will reside
 - How the tradeoffs between monopolistic economies of scale and entrepreneurial flexibility will be balanced within the enterprise.
- A delivery model defines the way in which a specific IT organization orchestrates its capabilities to deliver against its core value proposition.
 - Four basic IT Delivery models are Asset-, Process-, Service- and Value-optimizing models
- The IT organizational architecture describes the way the IT capabilities and resources are orchestrated to deliver expected benefits. The following factors change, depending on the delivery model being followed:
 - Funding mechanisms
 - Organizational structure
 - Process design
 - Strategic sourcing
 - Human capital requirements and management conventions
 - Tools and automation.



Appendix D

Deliverable D — Maturity and Gap Analysis Summary

Maturity and Gap Analysis

Gartner Approach

- Next, using target states determined using DTMB customers' stated needs, and DTMB leadership's goal of becoming a best-in-class service provider, Gartner performed a maturity gap analysis.

Plan	Analyze				Strategize		
	Major Tasks						
Project Plan and Management	Baseline Assessment	State Business Needs	Business, Services and Technology Opportunities	Maturity and Gap Analysis	Recommend	Road Map	Final Report
	Key Activities						
<ul style="list-style-type: none"> Project Planning and Orientation Project Kickoff Data Collection Planning and Tools Overview Finalize Project Work Plan Finalize Project Communication and Administrative Activities 	<ul style="list-style-type: none"> Initiate data-collection instruments (surveys, BM templates, documents) Conduct business and IT interviews Understand MI ICT's vision, and service and operating models Document Current State Environment Report 	<ul style="list-style-type: none"> Review current and future ICT needs and priorities based on current state evaluation and analysis of ICT strategies and IT leaders' future vision Aggregate and summarize business and technology interviews into business needs Develop State Business Needs Report 	<ul style="list-style-type: none"> Define viable business, services and technology improvement scenarios Identify potential risks and mitigation strategies Analyze improvement scenarios against MI requirements to determine viability Identify shared-services opportunities 	<ul style="list-style-type: none"> Integrate comprehensive analysis and assessments Evaluate IT capabilities against peers utilizing benchmarking analysis for Technology, People and Processes, and Capabilities Evaluate IT capabilities to meet State business direction, vision and goals 	<ul style="list-style-type: none"> Develop Business Model and Technology Solutions recommendations Expand recommendations and provide additional detail and due diligence Review recommendations with Governor's office, DTMB and IT advisors 	<ul style="list-style-type: none"> Develop implementation strategy and plan 	<ul style="list-style-type: none"> Develop Final Report Develop Recommendations Summary Presentation Develop Communications Plan Develop Change Management Plan Conduct Executive Presentation
	Deliverables						
<ul style="list-style-type: none"> Final Project Plan Status Reports (ongoing) 	<ul style="list-style-type: none"> Deliverable A — Evaluation of Current State Environment Deliverable B — Evaluation of the State's Business Needs Deliverable C — Identification of Business, Services and Technology Opportunities Deliverable D — Maturity and Gap Analysis 				<ul style="list-style-type: none"> Deliverable E — Recommendations for Business Model Alternatives Deliverable F — Road Map to Implementation Deliverable G — Final Report and Executive Presentation 		
	How well does DTMB currently operate?	Which current and future needs must DTMB address?	Which opportunities can DTMB capitalize on?	Which gaps and areas of improvement can DTMB address?	Which investments and activities does Gartner recommend?	How does the State implement the recommendations?	How do we best communicate the plan for action to stakeholders?

Maturity and Gap Analysis

Background and Overview

- Gartner determined a target maturity level for each role perspective (enterprise architecture, infrastructure and operations, security, applications, etc.) in each dimension of technology, organization, process, strategy and service level.
 - The maturity scale is developed using defined evaluation criteria based on industry best practices, meaning that a Level 5 is the absolute best practice in the industry for that activity. Relatively few organizations make the investment to become Level 5 in all of the areas, because it would be prohibitively expensive to do so without a commensurate payback.
 - Target states were determined using a combination of feedback from DTMB customers' stated needs, and DTMB leadership's stated goal of becoming a best-in-class service provider. If achieved, the target states chosen will very likely exceed the performance of the vast majority of (if not all) public sector organizations.
- Using the Current State and Target State, Gartner prepared Deliverable D — Gap Analysis, to highlight the necessary actions that DTMB must perform in order to move the organization from the Current State to the Target State.

Maturity and Gap Analysis

Major Themes

The Gap Analysis identified role-specific gaps that DTMB can address, but a holistic review of these gaps, informed by the findings of Deliverables A–C, reveals several key themes:

- **Improve customer relationship management** — Although the implementation of Information Officers (IOs) is a good initial step for DTMB, the role and responsibilities for customer relationship management must be clearly defined and communicated. Also, DTMB must address its shortage of skilled relationship management staff.
- **Define a service portfolio that communicates business value** — Although DTMB has various service catalogs and provides monthly SLA reports, DTMB must establish a service portfolio that communicates the business value of its services to its customers. In order to define services in terms of business value, DTMB must work with agencies to define the roles and responsibilities of a business analyst.
- **Understand and manage to cost** — DTMB information technology services are subject to federal requirements for cost recovery with a 100% chargeback model. Although DTMB's current financial management processes are primarily driven by cost recovery, DTMB must better understand the cost of service delivery and manage its resources accordingly. As DTMB improves its cost estimations and resource management processes, project portfolio management will increase in importance because agency priorities will need to be understood and expectations will need to be managed.

Maturity and Gap Analysis

Major Themes (Cont'd)

- **Coordinate innovation efforts** — Although DTMB has established an innovation fund and has been recognized nationally for past projects, DTMB must clearly establish an innovation owner who will be responsible for understanding business needs and technology trends so that innovative services that provide business value can be continually defined and improved.
- **Implement end-to-end project management** — Although DTMB has several project management offices (PMOs) and has defined SUITE as a project management methodology, DTMB must formally standardize project management processes and address the need for skilled project managers. The formalization of project management processes will include basic project management functions such as managing scope, schedule and budget, but it must also include project benefits identification, requirements preparation and defined integration points with enterprise architecture, security and procurement.
- **Conduct application portfolio management** — Although DTMB is able to support various types of applications for 17 agencies, there are numerous technology platforms in place today for building applications that should be retired and/or replaced with existing technologies already being used by DTMB. This is evident in the very high-level application support costs found in the Application Benchmark.
- **Optimize procurement and vendor management** — Although procurement is in the same organization as IT, the procurement and vendor management of IT services should be re-examined from a technology and process perspective to drive down contractor costs and ensure that vendors are held to DTMB's quality/delivery standards.

Maturity and Gap Analysis

Summary

CIO — Business Alignment and Effectiveness

- DTMB needs to develop a closer relationship with the customer agencies by re-examining the IO reporting lines and how IOs are assigned to agencies. The IO model currently does not extend itself through the Center for Shared Solutions effectively to an external customer base.
- No final determination has been made on whether DTMB's end state is to be a world-class IT service provider that sells its services externally, and a sufficient engagement model to make this a reality does not exist.

CIO — Operations Management

- To address customers' concerns about cost management, DTMB should re-examine its financial management processes to focus on a total cost of ownership (TCO) perspective to manage IT assets and report costs to clients. This approach will assist clients in prioritizing projects, understanding total costs, and targeting cost reductions.
- To deal with recruitment of project manager and developer personnel into Agency Services, DTMB should re-examine civil service classification rules, processes and policies that inhibit DTMB's ability to replace high-priced contractors with internal State resources.
- There is currently a lack of relationship management vs. technical career path planning.

Applications

- Application Performance Management is not currently performed to drive down application support costs.
- DTMB should enable dynamic, demand-driven sharing of quality assurance and software infrastructure resources across Agency Services in the short term, and sharing of project managers and developers in the medium-to-long term.
- Quality assurance processes and deliverable quality standards need to be centralized and harmonized across all Agency Services teams.
- Although the SUITE process is robust, it is not consistently used, nor institutionalized.
- Most COTS and ERP applications are highly customized, driving support costs higher than the 75th percentile peer group.

Program and Portfolio Management

- The ePMO should span across Infrastructure Services and Agency Services by reporting to an executive-level function that reports up directly to the CIO.
- The Call for Projects process should be focused on enterprise portfolio management, and should be less focused on IT strategic management.

Business Intelligence and Performance Management

- A centralized Business Intelligence, Data Warehousing and Enterprise Information Management organization is needed to coordinate data management across the enterprise and across agency boundaries.
- An Enterprise Information Management strategy needs to be developed across the agencies for the entire State enterprise, which would enable enhanced fraud detection and more citizen-centric services to the public.

Maturity and Gap Analysis

Summary (Cont'd)

Enterprise Architecture

- DTMB should define the vision, goals and scope of the Enterprise Architecture (EA) for Michigan, taking into account the federation of the agencies and their needs.
- DTMB needs to increase scope of EA coverage to include comprehensive data/information architecture, integration architecture, business architecture and solution architecture.
- EA should report into the CIO or separate Chief Technology Officer (CTO) function, as opposed to reporting to Infrastructure Services.

Infrastructure and Operations

- A long-term data center strategy is needed to provide additional capacity, and capital investment is needed at two of the hosting sites.
- DTMB needs to improve automation of manual processes within Infrastructure Services (e.g., run book automation, event management, status monitoring, performance management, workflow management).
- DTMB should reduce/consolidate Infrastructure Services (IS) service catalog from an IT Tower-based view to an IS common view. Services should be end-user-based/oriented, as opposed to IT Domain-specific. The IT product manager should be tasked with ensuring all IT services are delivering the IS common services.

Procurement and Vendor Management

- DTMB should develop a clear business case for eProcurement deployment.
- DTMB should assess opportunities to establish alternatives to some or all of the current commodity contracts in order to maximize the value of the admin fee currently paid for this service.
- DTMB should demonstrate clearly — in the short term — that Michigan will require changes or terminate a contract and leverage an available commodity contract.
- DTMB should establish a stakeholder group to document a repeatable process that will be used for contract and vendor management moving forward.

Security and Risk Management

- DTMB should conduct a comprehensive enterprisewide security risk assessment of the State's environment that identifies the realistic threats facing the State and the gaps the State needs to plug to remediate the threats.

Appendix E

Deliverable E — Recommendations Summary

Recommendations

Gartner Approach

- Starting with Governor Snyder's vision for the State of Michigan, and combining with DTMB goals, customer feedback and target-state maturity objectives, Gartner then developed a set of key recommendations.

Plan	Analyze				Strategize		
	Major Tasks						
Project Plan and Management	Baseline Assessment	State Business Needs	Business, Services and Technology Opportunities	Maturity and Gap Analysis	Recommend	Road Map	Final Report
	Key Activities						
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	Deliverables						
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	How well does DTMB currently operate?	Which current and future needs must DTMB address?	Which opportunities can DTMB capitalize on?	Which gaps and areas of improvement can DTMB address?	Which investments and activities does Gartner recommend?	How does the State implement the recommendations?	How do we best communicate the plan for action to stakeholders?

Recommendations

Reinventing Michigan: Goals

- In order to govern the future path and recommendations for DTMB, Gartner started with Governor Snyder’s primary tenets for reinventing the State of Michigan to hone in on the specific principles germane to the mission and vision of DTMB.

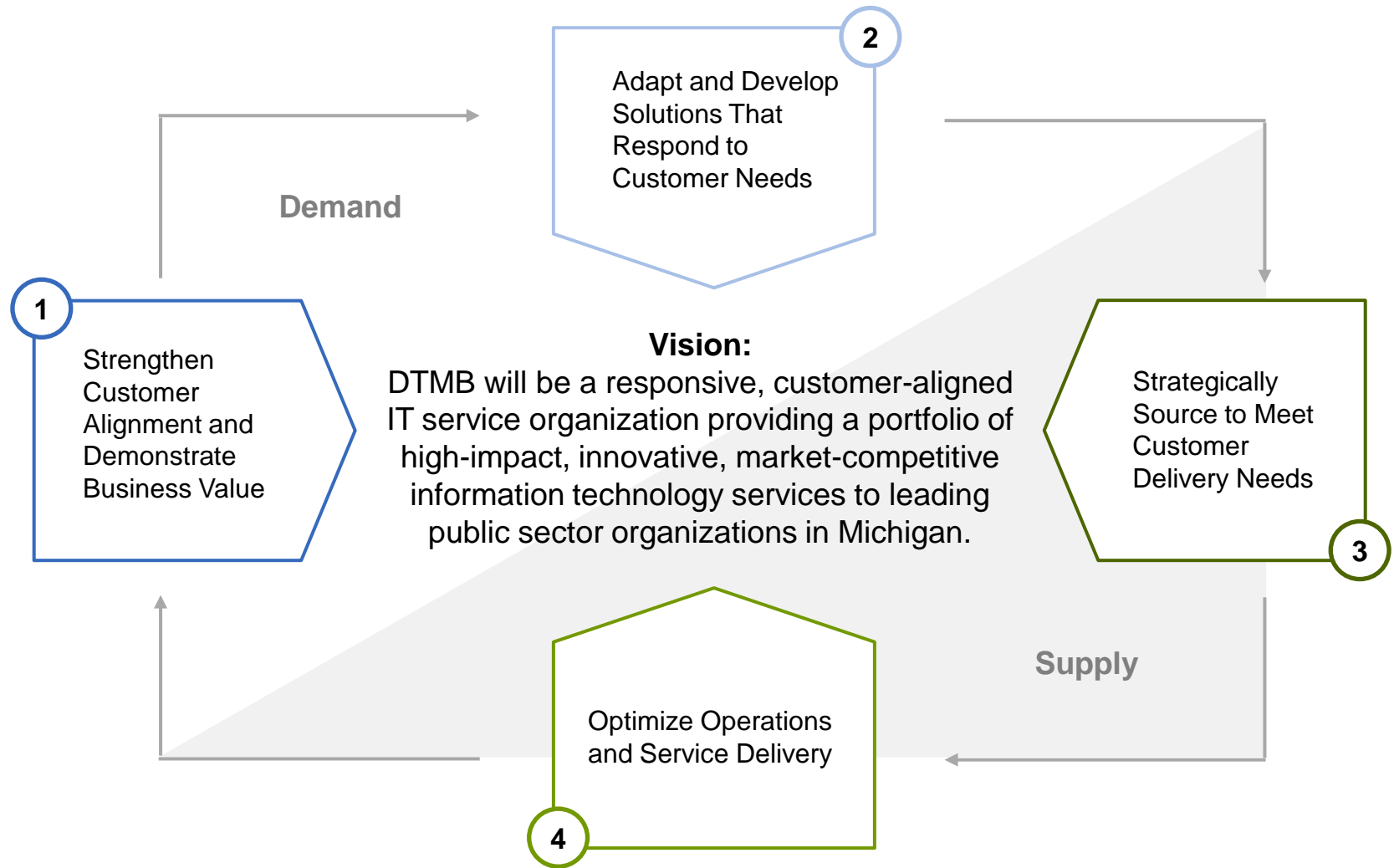
Governor Snyder’s Plan for Reinventing Michigan

1. Create more and better jobs
2. Leverage our new tax system
3. Reinvent Our Government
4. Keep our youth — our future — here
5. Restore our cities
6. Enhance our national and international image
7. Protect our environment
8. Revitalize our educational system
9. Reinvent our healthcare system
10. Winning in Michigan through Relentless Positive Action

Although the recommended actions resulting from this study can positively influence and support all the Governor’s goals, DTMB can directly benefit the State of Michigan by focusing its efforts on #3 — Reinvent Our Government.

Recommendations

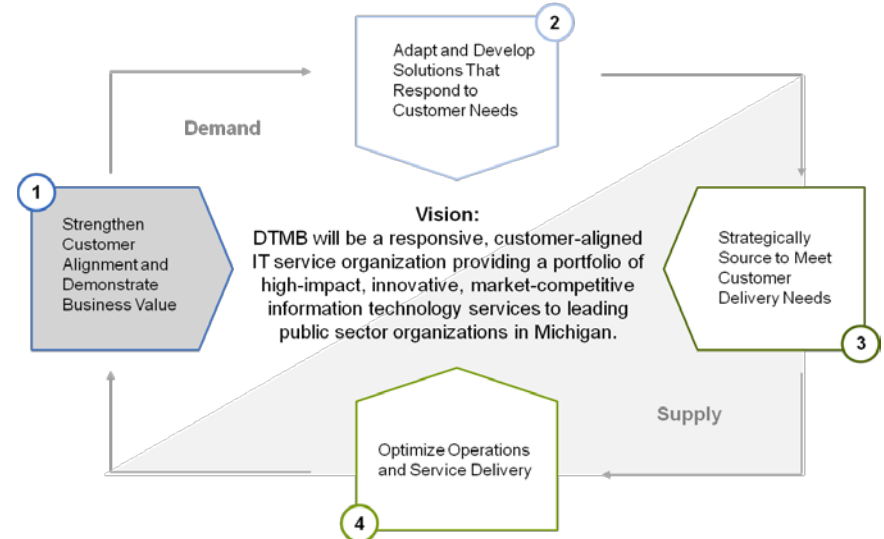
Four Fundamental Strategic Goals to Achieve the DTMB Future Vision



Recommendations

Goal 1: Strengthen Customer Alignment and Demonstrate Business Value

- Of the four fundamental strategic goals, **the first two goals constitute the demand side** of service delivery that needs to be supplied by DTMB to achieve its vision. Managing and shaping this demand through effective service management is key to achieving DTMB's broader IT strategy.
- In order to achieve the stated vision, DTMB should adopt and implement a series of recommendations that “reset” the relationship with the customer base. This “reset” needs to rebuild the relationship from the ground up with the basic blocking and tackling of how services are defined and delivered to customers.

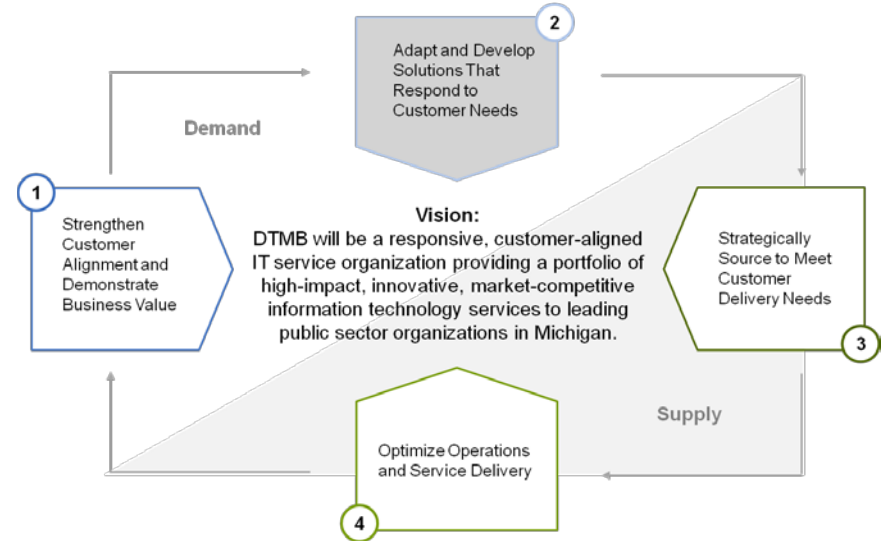


Goal 1. Strengthen Customer Alignment and Demonstrate Business Value	
Recommendation 1—1	■ Determine a Governance Model and Process to Allow for Accountability and Transparent Prioritization
Recommendation 1—2	■ Realize Opportunities to Expand Shared Services
Recommendation 1—3	■ Become a More Responsive and Customer-Aligned Organization

Recommendations

Goal 2: Adapt and Develop Solutions That Respond to Customer Needs

- Complete and total alignment between what customers want in terms of services and value, and what DTMB provides in terms of solutions, is paramount. How the services are constructed from different components should be secondary to the understanding how those components are put together to deliver business value.

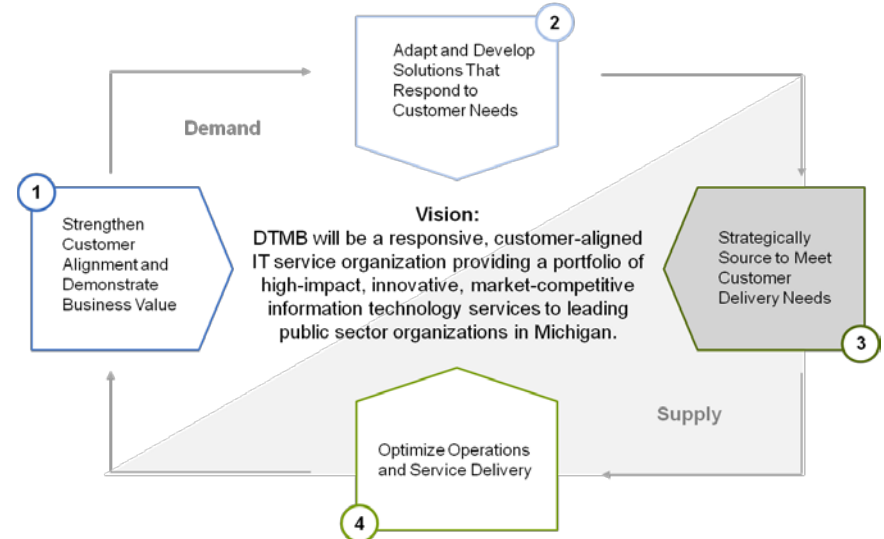


Goal 2. Adapt and Develop Solutions That Respond to Customer Needs	
Recommendation 2—1	■ Redefine DTMB Services
Recommendation 2—2	■ Redefine DTMB Service Delivery Model
Recommendation 2—3	■ Deliver Solutions That Respond to Urgent Unfulfilled Customer Needs
Recommendation 2—4	■ Establish Foundation for Continued Innovation

Recommendations

Goal 3: Strategically Source to Meet Customer Delivery Needs

- When customer demand has been understood and managed, DTMB must address how those demands will be supplied as efficiently and cost-effectively as possible. To that end, the **second two recommendations focus on the supply side** of service delivery.
- Once the services are redefined and an enhanced service model is in place, DTMB needs to have a predetermined method, procedure and decision rules for deciding the best supplier for each service. DTMB also needs to implement the procurement organization, processes and systems to truly support significant oversight of externally sourced services.



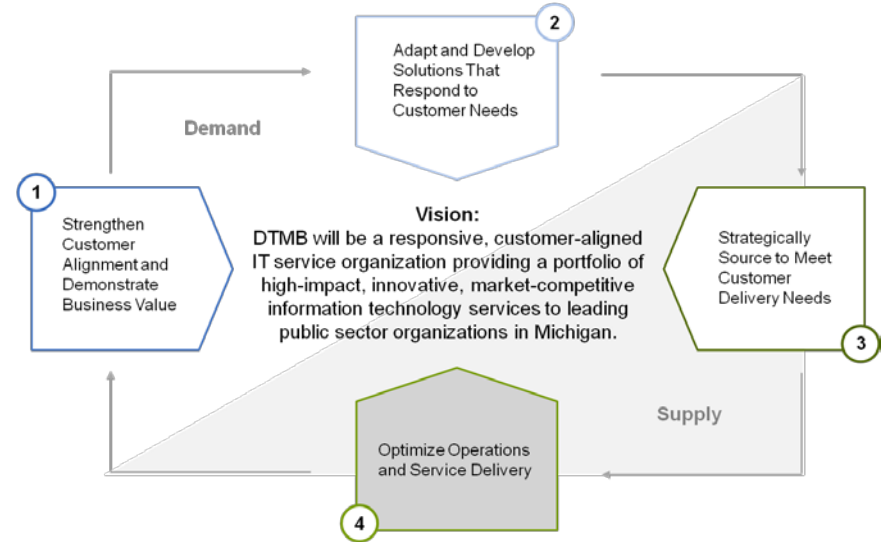
Goal 3. Strategically Source to Meet Customer Delivery Needs

- | | |
|---------------------------|---|
| Recommendation 3—1 | ■ Develop an Enterprise Sourcing Strategy |
| Recommendation 3—2 | ■ Improve Procurement and Vendor Management |

Recommendations

Goal 4: Optimize Operations and Service Delivery

- Finally, for those services that are to be sourced internally, DTMB should implement a series of recommendations that lead to revamped, best-practice IT operations from both a functional and technical perspective. These recommendations are focused on doing the right things, as well as doing things right.



Goal 4. Optimize Operations and Service Delivery	
Recommendation 4—1	■ Enhance IT Investment and Financial Management
Recommendation 4—2	■ Improve Resource Management
Recommendation 4—3	■ Enhance Workforce and Talent Management Processes
Recommendation 4—4	■ Mature and Promote Portfolio and Project Management
Recommendation 4—5	■ Rationalize Application Portfolio
Recommendation 4—6	■ Continue to Optimize Infrastructure and Operations
Recommendation 4—7	■ Enhance Security of State Assets and Data

Recommendations

Synergy among Goals and Recommendations

- The synergistic relationships between the strategic goals, as well as their associated recommendations, tell a compelling story of how DTMB can improve to best serve its customers from a cradle-to-grave process perspective.
- By adapting the approach to customer service and definition of solutions and services, DTMB can improve its customer alignment and satisfaction. Through strategic sourcing and continuous improvement of its operations, it can deliver said solutions and services in a high-quality, cost-effective manner.
- The relationships and “flow” from Goals 1 through 4 are described below:
 - **Goal 1** recommendations center on organizational, process and outreach activities that will help DTMB transform into a strategic partner for its current and potential customer base, while also instituting governance and prioritization improvements that benefit the State as a whole.
 - **Goal 2** recommendations focus on mastering solution development and service delivery to adeptly respond to customer business needs. Through a revised delivery model, formalized innovation practices and capitalizing on current untapped needs, the State can provide high-value services that better meet the strategic and tactical requirements gathered through **Goal 1**.
 - **Goal 3** recommendations strategically source the resources required to deliver the comprehensive and customer-oriented catalog of solutions and services borne via **Goal 2**. Through more timely, efficient and cost-effective sourcing practices, the State can yield better value and flexibility from its technology investments.
 - **Goal 4** recommendations hone in on value-added efficiency, consolidation and optimization activities that will enable DTMB to maximize its use and protection of technology assets and data. The continuous improvement objectives that comprise **Goal 4** underpin and fuel the efficacy of **Goals 1, 2 and 3**.

Recommendations

Strategic Goals: Mapping to RFP Goals

- The strategic goals were mapped to the ICT goals stated in the RFP to ensure that recommendations support the objectives of DTMB.

	(1) Strengthen Customer Alignment and Demonstrate Business Value	(2) Adapt and Develop Services That Respond to Customer Needs	(3) Strategically Source to Meet Customer Delivery Needs	(4) Optimize Operations and Service Delivery
Quality of Life	✓	✓		
Value-for-Money Government			✓	✓
People — Health and Education	✓	✓		
Public Safety		✓		✓
Economic Strength			✓	✓

Recommendations

Strategic Goals: Mapping to Current-State Assessment Themes

- The strategic goals align closely with the themes and major findings contained in Deliverable A — Current-State Assessment, illustrated in the matrix below.

	(1) Strengthen Customer Alignment and Demonstrate Business Value	(2) Adapt and Develop Services That Respond to Customer Needs	(3) Strategically Source to Meet Customer Delivery Needs	(4) Optimize Operations and Service Delivery
Customer Alignment and Relationship Management Are Challenged	✓			
Unclear Business Value of DTMB Services	✓	✓		
Cost Control and Efficiency Opportunities Exist			✓	✓
Innovation Successes Lay Foundation for Future Improvements		✓		
Skilled, But Sub-optimally Utilized Workforce			✓	✓
Procurement and Vendor Management Issues Impact Efficiency			✓	
Continued Improvement of Strong Management and Protection of DTMB Assets				✓

Recommendations

Strategic Goals: Mapping to Needs Assessment Themes

- In addition, the strategic goals align closely with the themes and major findings contained in Deliverable B — Needs Assessment, illustrated in the matrix below.

	(1) Strengthen Customer Alignment and Demonstrate Business Value	(2) Adapt and Develop Services That Respond to Customer Needs	(3) Strategically Source to Meet Customer Delivery Needs	(4) Optimize Operations and Service Delivery
Service Delivery Issues			✓	✓
Low Perceived Customer Value of IT Services	✓	✓		✓
Lack of Project Orientation				✓
Misalignment with Strategic Priorities	✓			
Opportunity to Expand Services to Local Entities	✓		✓	

Recommendations

Strategic Goals: Mapping to Gap Analysis Themes

- Finally, the strategic goals align closely with the themes and major findings contained in Deliverable D — Gap Analysis, illustrated in the matrix below.

	(1) Strengthen Customer Alignment and Demonstrate Business Value	(2) Adapt and Develop Services That Respond to Customer Needs	(3) Strategically Source to Meet Customer Delivery Needs	(4) Optimize Operations and Service Delivery
Improve Customer Relationship Management	✓			
Define a Service Portfolio That Communicates Business Value		✓		
Understand and Manage to Cost				✓
Coordinate Innovation Efforts		✓		
Implement End-to-End Project Management				✓
Conduct Application Portfolio Management				✓
Optimize Procurement and Vendor Management			✓	

Recommendations

Goal 1. Strengthen Customer Alignment and Demonstrate Business Value

- In order to achieve the stated vision, DTMB should adopt and implement a series of recommendations that “reset” the relationship with the customer base. This “reset” needs to rebuild the relationship from the ground up with a focus on the fundamental activities for how services are defined and delivered to customers.
- Goal 1 recommendations center on organizational, process and outreach activities that will help DTMB transform into a strategic partner for its current and potential customer base, while also instituting governance and prioritization improvements that benefit the State as a whole.

Recommendation 1—1	Become a More Responsive and Customer-Aligned Organization
Rationale	<p>Deliverables A, B and D all identified customer alignment as a critical improvement area for DTMB:</p> <ul style="list-style-type: none">■ The Current-State Assessment stated that customer alignment and relationship management are challenged.■ The Needs Analysis stated there is misalignment between IT and the strategic priorities of customers.■ The Gap Analysis identified improving customer relationship management as a key opportunity.
Requirements	<ol style="list-style-type: none">1. DTMB must establish itself as a strategic partner to its customers and work with its customers to define IT strategies that meet business needs and align with the overall IT direction of the State.2. DTMB must clearly define the roles and responsibilities within its customer service model.3. DTMB must establish the role of a business analyst who is responsible for understanding the business of its customers.4. DTMB must proactively measure customer satisfaction on a periodic basis (e.g., monthly or quarterly).5. DTMB must take action on customer feedback so that customer satisfaction responses improve or remain high.

Recommendations

Goal 1. Strengthen Customer Alignment and Demonstrate Business Value (Cont'd)

Recommendation 1—2		Realize Opportunities to Expand Shared Services
Rationale	Interviews with local governments indicated a willingness to share services with the State as long as services are market-competitive.	
Requirements	<ol style="list-style-type: none">1. DTMB must define a formal strategy for marketing its services and solutions to potential partners.2. DTMB must explore the possibilities of sharing services with local governments as well as State, federal and commercial organizations.3. DTMB must conduct a market pricing analysis to determine if it will be price-competitive.	

Recommendation 1—3		Determine a Governance Model and Process to Allow for Accountability and Transparent Prioritization
Rationale	As DTMB coordinates IT solutions and services across the enterprise, the importance of accountability and transparency increases.	
Requirements	<ol style="list-style-type: none">1. DTMB must establish a governance model and processes that allow customers to voice the importance of their projects and initiatives during the project funding and prioritization processes.	

Recommendations

Goal 2. Adapt and Develop Solutions That Respond to Customer Needs

- Complete and total alignment between what customers want in terms of services and value, and what DTMB provides in terms of solutions, is paramount. How the services are constructed from different components should be secondary to the understanding how those components are put together to deliver business value.
- Goal 2 recommendations focus on mastering solution development and service delivery to adeptly respond to customer business needs. Through a revised delivery model, formalized innovation practices, and capitalizing on current untapped needs, the State can provide high-value services that better meet the strategic and tactical requirements gathered through Goal 1.

Recommendation 2—1	Redefine DTMB Services
Rationale	<p>Deliverables A, B and D all identified clearly defining the business value of DTMB services as a critical improvement area for DTMB:</p> <ul style="list-style-type: none">■ The Current-State Assessment stated that the business value of DTMB services is not well-communicated.■ The Needs Analysis stated that current DTMB IT services provide low value.■ The Gap Analysis identified defining an enterprise service catalog that communicates business value as a key opportunity.
Requirements	<ol style="list-style-type: none">1. DTMB must create an enterprise service catalog that articulates DTMB services and solutions in a manner that communicates business value to customers.2. DTMB must define an enterprise service catalog that clearly defines the service level expectations and pricing for each service.

Recommendations

Goal 2. Adapt and Develop Solutions That Respond to Customer Needs (Cont'd)

Recommendation 2—2	Redefine DTMB Service Delivery Model
Rationale	During the interviews, several customers observed a disconnect between the customer service side of IT and the service delivery side of IT, and this disconnect was often seen as the cause for project delays or sub-optimal response time to service requests.
Requirements	<ol style="list-style-type: none">1. DTMB must define a service delivery model that defines how services and solutions will be provided to customers.2. DTMB must clearly define the roles and responsibilities within its service delivery model.3. DTMB must establish the role of a service manager who is responsible for coordinating and delivering a specific service on the enterprise service catalog.

Recommendation 2—3	Deliver Solutions That Respond to Urgent Unfulfilled Customer Needs
Rationale	Interviews with DTMB's existing and potential customers revealed a few immediate needs that should be evaluated and addressed by DTMB during this strategic transition: <ul style="list-style-type: none">■ Mobile solutions.■ Improved business intelligence (BI) capabilities.■ Ability to facilitate customer self-service.
Requirements	<ol style="list-style-type: none">1. DTMB must work with its customers to define mobile solution requirements and to develop a mobile solution service offering to include in the enterprise service catalog.2. DTMB must work with its customers to define BI requirements and to develop a BI solution service offering to include in the enterprise service catalog.3. DTMB must work with its customers to assess the business need and requirements for customer self-service offerings.

Recommendations

Goal 2. Adapt and Develop Solutions That Respond to Customer Needs (Cont'd)

Recommendation 2—4	Establish Foundation for Continued Innovation
Rationale	<p>The State of Michigan has been recognized as one of the most innovative states in the country, but it must formalize its processes for understanding business needs and developing innovative technical solutions to address those needs.</p> <p>Also, each agency has historically developed technical solutions that only addressed their specific business needs. DTMB is well-positioned to evaluate future IT investments and to determine whether they can benefit several agencies.</p>
Requirements	<ol style="list-style-type: none">1. DTMB must formally establish the role of a Chief Technology Officer (CTO) who will be responsible for innovation and overseeing enterprise architecture.2. DTMB must formally document enterprise architecture processes and standards.3. DTMB must ensure that enterprise architecture is included in the solution definition process.4. DTMB must define processes that coordinate the transition of innovative solutions into the enterprise service catalog.

Recommendations

Goal 3. Strategically Source to Meet Customer Delivery Needs

- Once the services are redefined and an enhanced service model is in place, DTMB needs to have a pre-determined method, procedure and decision rules for deciding the best supplier for each service. DTMB also needs to implement the procurement organization, processes and systems to truly support significant oversight of externally sourced services.
- Goal 3 recommendations strategically source the resources required to deliver the comprehensive and customer-oriented catalog of solutions and services borne via Goal 2. Through more-timely, efficient and cost-effective sourcing practices, the State can yield better value and flexibility from its technology investments.

Recommendation 3—1	Develop an Enterprise Sourcing Strategy
Rationale	Once DTMB identifies and defines the services and solutions required to meet customer needs, it must evaluate whether it should provide the service or whether it should partner with another organization for the provision of the service. DTMB must also establish a process to continually evaluate its service portfolio to assess the appropriate sourcing approach for each service.
Requirements	<ol style="list-style-type: none">1. DTMB must define an enterprise sourcing strategy for its current services.2. DTMB must execute the sourcing strategy.3. DTMB must establish ongoing sourcing efficacy processes.

Recommendations

Goal 3. Strategically Source to Meet Customer Delivery Needs (Cont'd)

Recommendation 3—2	Improve Procurement and Vendor Management
Rationale	DTMB's sourcing and vendor management processes are currently performed on a relatively ad hoc basis with a sub-optimal organizational structure and too many transactional systems.
Requirements	<ol style="list-style-type: none">1. DTMB must establish and formally document procurement and contract management processes.2. DTMB must resource critical procurement organizational functions.3. DTMB must automate the procurement process through the deployment of an eProcurement system.4. DTMB must research and establish a future-state revenue model to assist in supporting the procurement functions, including both appropriate staffing and deployment of the eProcurement system.5. DTMB must re-evaluate current procurement vehicles to develop a priority matrix to drive renegotiation of pricing and terms where appropriate.

Recommendations

Goal 4. Optimize Operations and Service Delivery

- Finally, for those services that are to be sourced internally, DTMB should implement a series of recommendations that lead to revamped, best-practice IT operations from both a functional and technical perspective. These recommendations are focused on doing the right things, as well as doing things right.
- Goal 4 recommendations hone in on value-added efficiency, consolidation and optimization activities to enable DTMB to maximize its use and protection of technology assets and data. The continuous improvement objectives that comprise Goal 4 underpin and fuel the efficacy of Goals 1–3.

Recommendation 4—1	Enhance IT Investment and Financial Management
Rationale	<p>DTMB does not have specific line-item budgets for individual projects, which prevents it from managing to defined project budgets. Also, a large factor that drove the perception of high costs and the low value for IT services was the lack of definition for project costs.</p> <p>Also, DTMB does not have a defined investment management process that evaluates the benefits and costs of potential projects prior to making investment or prioritization decisions. Because business benefits are not clearly identified in the beginning, it becomes difficult to gauge the progress or success of these investments.</p>
Requirements	<ol style="list-style-type: none">1. DTMB must define specific budgets for each IT investment.2. DTMB must promote an expectation that projects will be managed against defined budgets and that additions to scope or schedule will impact the cost for the delivery of the project.3. DTMB must have chargeback transparency in the rate card so that customers understand what is included in the rates for each service.4. DTMB must facilitate the ROI/Benefits Realization Process so that each customer acknowledges the projected benefits and costs for each of its initiatives.5. DTMB must increase its IT capital investments in order to refresh the State's legacy applications, improve the State's aging infrastructure and to become more in line with the capital expenditure/operating expenditure ratios of its peers.

Recommendations

Goal 4. Optimize Operations and Service Delivery (Cont'd)

Recommendation 4—2		Improve Resource Management
Rationale	Currently, each agency has dedicated resources, which creates significant redundancy in the Agency Services organization. DTMB can achieve economies of scale and improved expertise by pooling resources and creating centers of excellence. As resources become pooled, DTMB must improve its process for monitoring and assigning shared resources.	
Requirements	<ol style="list-style-type: none">1. DTMB must define and implement centers of excellence (COEs) and pooled resource groups across all agencies in Agency Services.2. DTMB must have a defined process in place to proactively monitor and manage the demand and capacity for DTMB resources.	

Recommendation 4—3		Enhance Workforce and Talent Management Processes
Rationale	<p>The Job Skills Inventory revealed certain skill gaps in the organization. As DTMB defines its customer relationship and service delivery models, DTMB must address the necessary skill gaps.</p> <p>As the Job Skills Inventory was conducted, it also became evident that the job titles and responsibilities often did not align and that there was no defined technical career path.</p>	
Requirements	<ol style="list-style-type: none">1. DTMB must identify key resource gaps to achieve DTMB goals and must develop internal training and sourcing allocation plans to address the gaps.2. DTMB must attract and retain talented staff.3. DTMB must rationalize job titles and responsibilities.4. DTMB must define career paths for technical resources.	

Recommendations

Goal 4. Optimize Operations and Service Delivery (Cont'd)

Recommendation 4—4		Mature and Promote Portfolio and Project Management
Rationale	DTMB has established an annual Call for Projects to inventory each agency project, but IOs still coordinate the projects for their specific departments. As DTMB matures the project portfolio management process across the enterprise, the project prioritization and resource allocation processes must improve. DTMB has also standardized on the SUITE project management methodology, but because the Enterprise Project Management Office (ePMO) reports to a single IO, the methodology has been inconsistently applied.	
Requirements	<ol style="list-style-type: none">1. DTMB must improve the portfolio management process (Call for Projects) and actively use it as the mechanism to prioritize projects across the enterprise.2. DTMB should standardize on a single portfolio management tool.3. DTMB must elevate the Enterprise Project Management Office (ePMO) by not having it report to a single IO.4. DTMB should centralize all project managers into the ePMO in order to drive consistent application of project management methodologies.5. DTMB must consistently enforce a project management standard for all projects.	

Recommendation 4—5		Rationalize Application Portfolio
Rationale	According to Gartner's application benchmark, the application support costs within DTMB are high compared to its peers. This cost is driven by the variety of application platforms supported and the age of several of the systems. DTMB must proactively rationalize its application portfolio by retiring legacy systems and replacing them with solutions built on newer technologies that comply with established enterprise architecture standards.	
Requirements	<ol style="list-style-type: none">1. DTMB must establish an Application Portfolio Management process.2. DTMB must assess legacy technologies and implement the application retirement strategy.3. DTMB must rationalize application tools and technologies against the enterprise architecture.	

Recommendations

Goal 4. Optimize Operations and Service Delivery (Cont'd)

Recommendation 4—6		Continue to Optimize Infrastructure and Operations
Rationale	According to the Infrastructure and Operations cost benchmark, DTMB is cost-competitive with its peers, but Gartner has identified a few potential opportunities to improve efficiency within IT operational areas. Gartner also identified evolving business and potential improvement opportunities that DTMB should explore further.	
Requirements	<ol style="list-style-type: none">1. DTMB must identify automation opportunities in IT operational areas.2. DTMB must understand evolving requirements for its data centers and networks, and must develop strategies that address increased or changing needs.3. DTMB must explore the possibility of consolidating call centers.	

Recommendation 4—7		Enhance Security of State Assets and Data
Rationale	As security threats become more prevalent and the impact of security breaches become more pronounced, DTMB must be proactive in securing its assets and information.	
Requirements	<ol style="list-style-type: none">1. DTMB must conduct a comprehensive security audit and risk assessment, and must implement corrective measures.2. DTMB must expand the scope of vulnerability scanning, cyber-security and risk management functions, and must improve the Security Operations Control (SOC).	

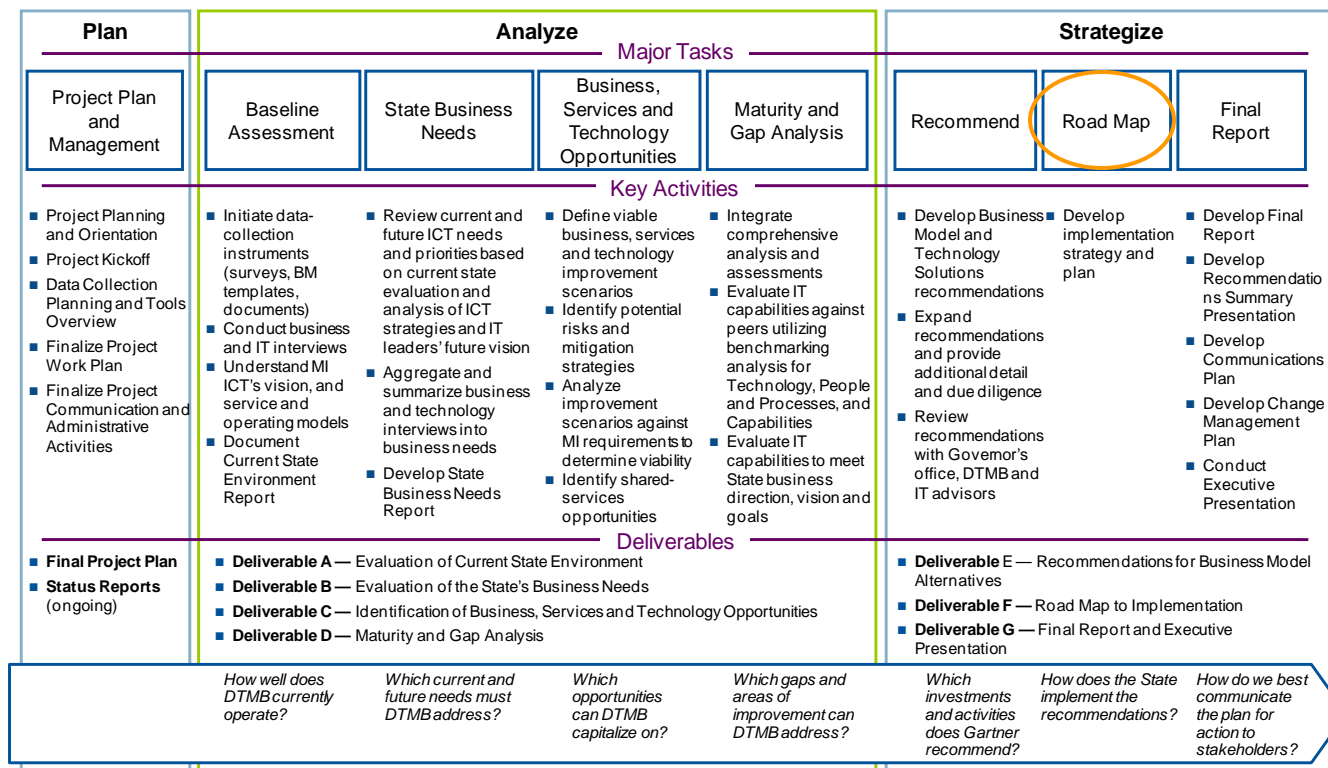
Appendix F

Deliverable F — Road Map Summary

Road Map

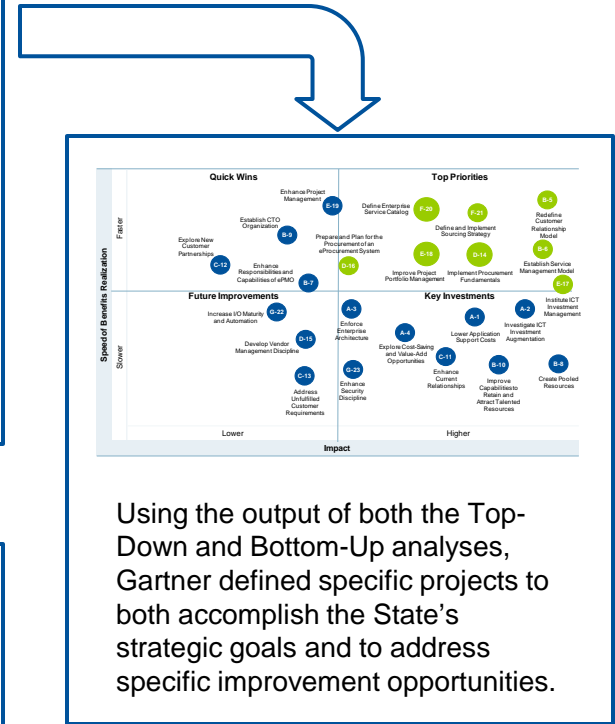
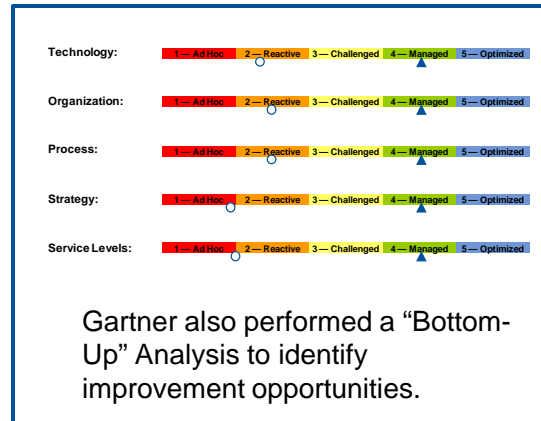
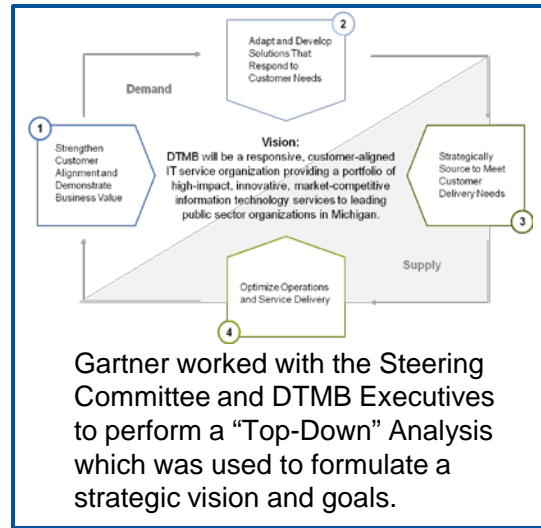
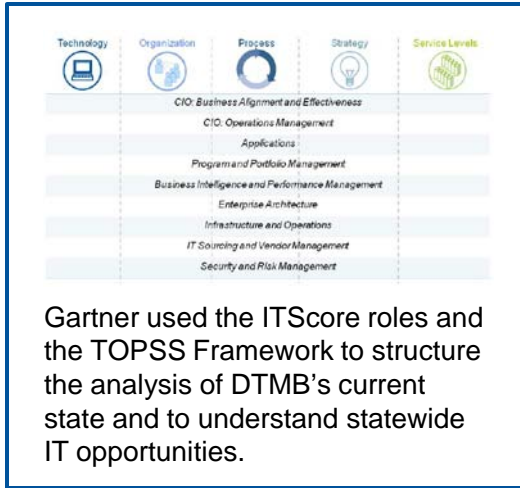
Gartner Approach

- Finally, to ensure that the path forward is well-defined and actionable for the State, Gartner developed a series of programs that DTMB can execute to meet its strategic goals and achieve its vision.



Road Map

Dual Approach for Defining Projects



Road Map

Gartner Defined the Specific Projects and Mapped Them to the Opportunities

Project	Project Short Description	Project Owner	Top Priority	Quick Win	Future Improvement	Key investment
A-1	Lower Application Support Costs	Agency Services				✓
A-2	Investigate ICT Investment Augmentation	CIO				✓
A-3	Enforce Enterprise Architecture	CTO		✓		✓
A-4	Explore Cost-Saving and Value-Add Opportunities	Procurement				✓
B-5	Redefine Customer Relationship Model	CIO	✓	✓	✓	✓
B-6	Establish Service Management Model	Solutions Portfolio Manager	✓			✓
B-7	Enhance Responsibilities and Capabilities of ePMO	ePMO		✓		✓
B-8	Create Pooled Resources	Agency Services				✓
B-9	Establish CTO Organization	CTO		✓	✓	✓
B-10	Improve Capabilities to Retain and Attract Talented Resources	CIO				✓
C-11	Enhance Current Relationships	Agency Services				✓
C-12	Explore New Customer Partnerships	CTPSS		✓		

NOTE: Top Priority projects shown here in **bold blue** type.

Road Map

Gartner Defined the Specific Projects and Mapped Them to the Opportunities (Cont'd)

Project	Project Short Description	Project Owner	Top Priority	Quick Win	Future Improvement	Key investment
C-13	Address Unfulfilled Customer Requirements	Solutions Portfolio Manager		✓	✓	
D-14	Implement Procurement Fundamentals	Procurement	✓			✓
D-15	Develop Vendor Management Discipline	Procurement			✓	
D-16	Prepare and Plan for the Procurement of an eProcurement System	Procurement	✓			
E-17	Institute ICT Investment Management	CIO	✓			✓
E-18	Improve Project Portfolio Management	ePMO	✓			✓
E-19	Enhance Project Management	ePMO		✓		✓
F-20	Define Enterprise Service Catalog	Solutions Portfolio Manager	✓			
F-21	Define and Implement Sourcing Strategy	Procurement	✓			
G-22	Increase I/O Maturity and Automation	Infrastructure Services			✓	
G-23	Enhance Security Discipline	Office of Enterprise Security		✓	✓	✓

NOTE: Top Priority projects shown here in **bold blue** type.


Road Map

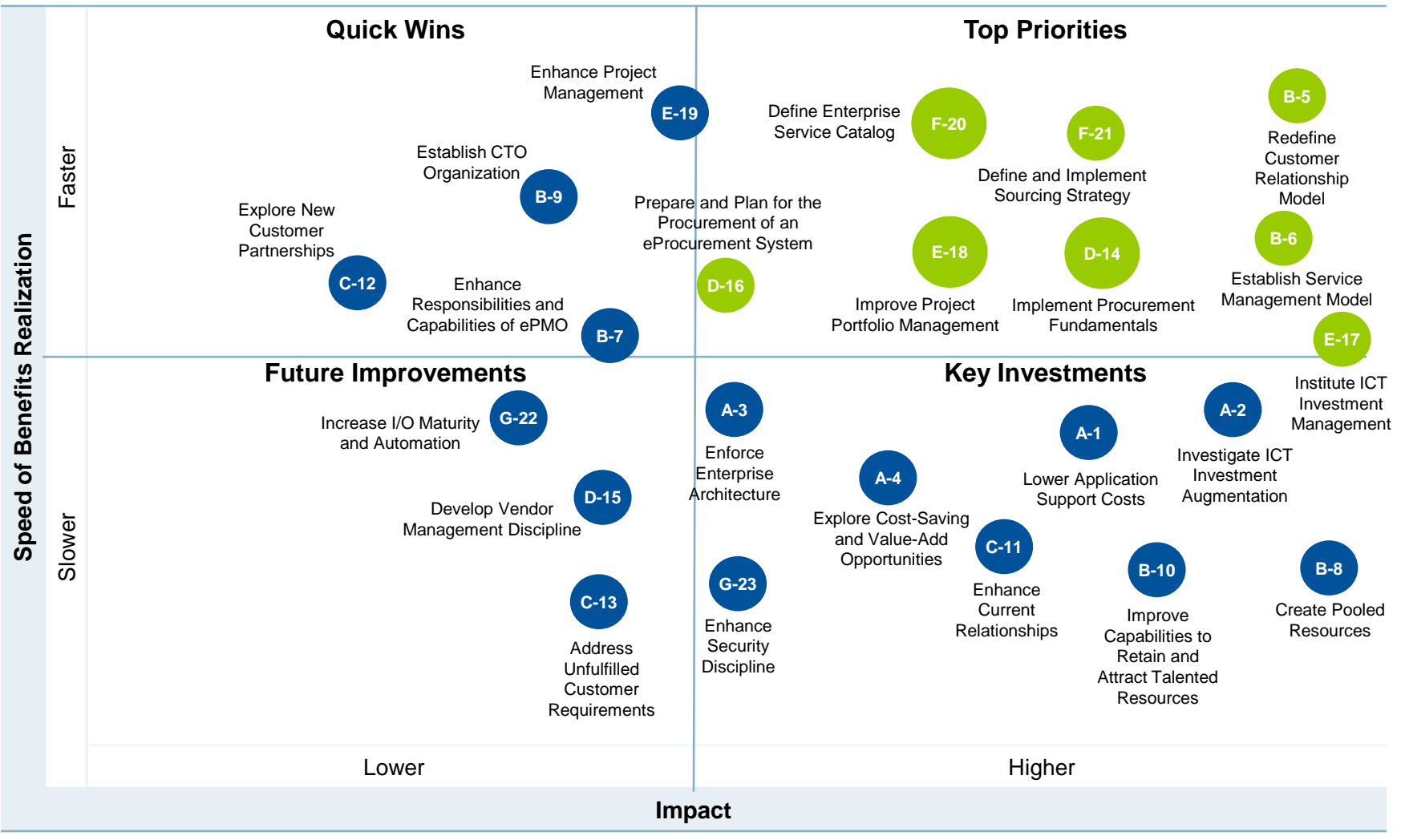
Gartner Defined the Specific Projects and Mapped Them to the Opportunities (Cont'd)

Speed of Benefits Realization	Faster		Slower	
	Quick Wins		Future Improvements	
	<ul style="list-style-type: none">■ Position the IO as a Strategic Partner (B-5)■ Engage Local Governments (C-12)■ Clarify Services to Customer Agencies (F-18)■ Leverage the Tools DTMB Already Owns■ Institutionalize Enterprisewide Reporting Tool (C-13)■ Realign EA to Report to an Executive-Level Function (B-9)■ Establish the Solution Architect Function (B-9)■ Reinforce SUITE Methodology (B-7; E-19)■ Standardize Project Status Reporting (E-19)■ Standardize Project Management Processes (E-19)■ Conduct a Comprehensive Risk Assessment (G-23)■ Improve Communications from EA to Stakeholders (A-3)■ Conduct Security Training (G-23)		<ul style="list-style-type: none">■ Operationalize the Strategic Plan (B-5)■ Become More Business Architecture-Driven (B-9)■ Implement Predictive Analytics (C-13)■ Build Enterprise Information Management (EIM) Capability (C-13)■ Enhance Governance of Business Intelligence (BI)/Performance Management (PM) Activities (C-13)■ Standardize Data Management Processes (C-13)■ Continue to Innovate Enterprise Architecture (B-9)■ Address Vendor Risk (D-15)■ Increase Scope of Vulnerability Management (G-23)■ Incorporate Privacy Management (G-23)■ Implement Automated ICT Operational Tools (G-22)■ Improve ICT Process Maturity (G-22)	
	Top Priorities		Key Investments	
<ul style="list-style-type: none">■ Address Agency Perception of DTMB's Business Value (F-20)■ Establish Business Analyst Function (B-5)■ Establish Agency ICT Strategic Planning Processes That Are Separate From the Call for Projects (E-17; E-18)■ Consolidate ICT Service Catalogs (B-6; F-20; F-21)■ Measure Customer Satisfaction (B-5)■ Improve Customer Metrics (B-5)■ Establish and Communicate Standard Procurement Process (D-14)■ Enable Procurement Automation (D-16)		<ul style="list-style-type: none">■ Improve Customer Service Satisfaction (C-11)■ Establish Internal Governance (E-17; E-18)■ Strengthen Application Portfolio Management (A-1)■ Optimize Resources to Enable Resource Pooling Across DTMB (B-8)■ Align Organizational Reporting and Governance Structure (B-5 thru B-9)■ Enhance Financial Management (A-2; E-17)■ Increase Skill and Training for Project Management Roles (B-7; B-10; E-19)■ Enable Citizen-Centric Government (A-4)■ Align EA with Industry Best Practices (A-3)■ Increase Scope of EA Coverage (A-3)■ More Closely Align Purchasing and Procurement Functions (D-14)■ Improve Security Operations Center (SOC) Operations (G-23)■ Enhance Data Security (G-23)		
		Lower	Higher	
Impact				

Road Map

DTMB Recommended Project Prioritization Heat Map

 Immediate-Focus Projects
(size relative to cost)



Road Map

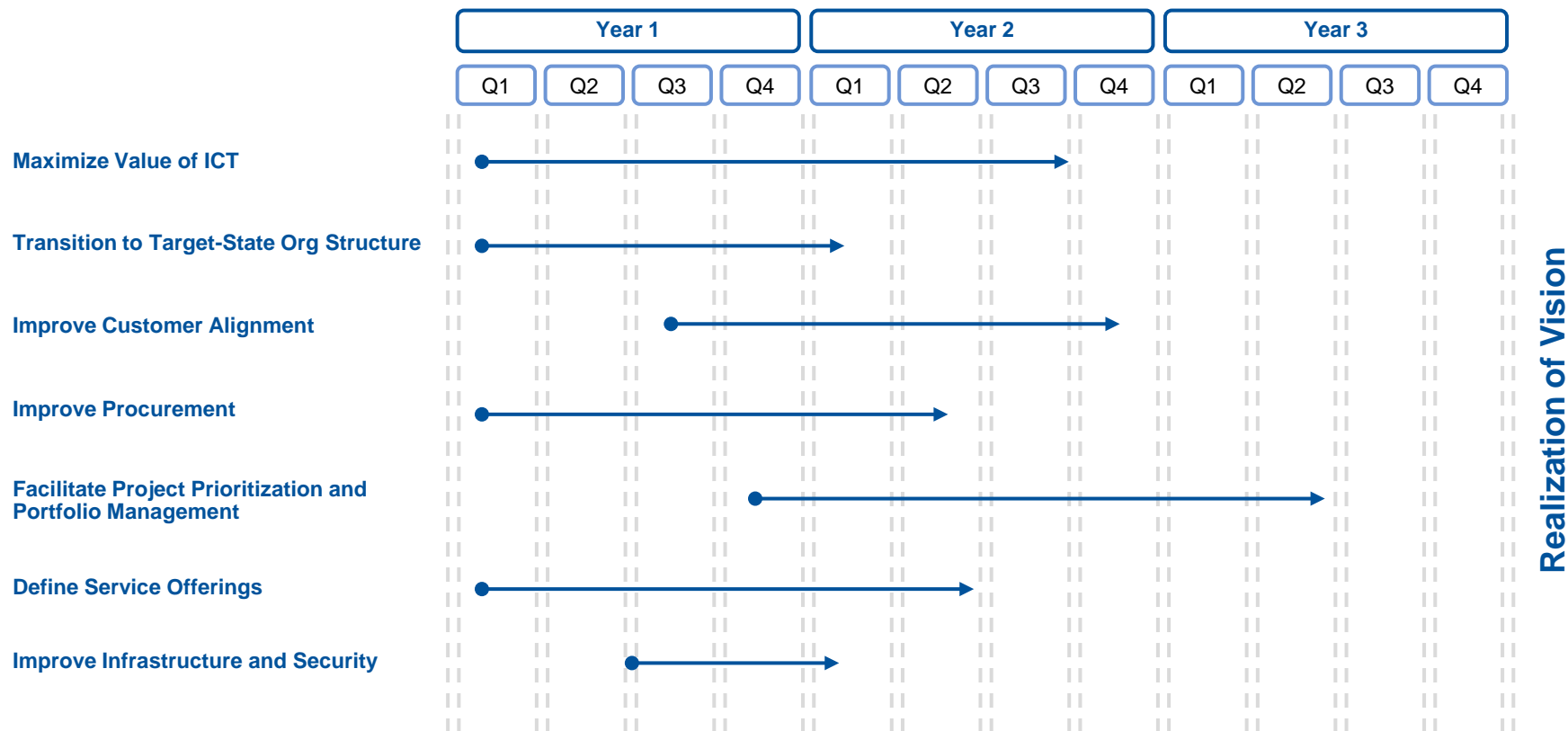
Grouping Projects into Programs

- As noted earlier, projects were grouped into programs to provide the State with actionable sets of activities that meet recommendation requirements.
- Each program will have an owner accountable for the successful execution, and the seven programs will be governed by a steering committee that will oversee the execution of the road map.
- The seven programs must be executed to achieve the four defined DTMB strategic goals and the overall DTMB vision. The programs are as follows:
 - A. Maximize Value of ICT
 - B. Transition to Target-State Organizational Structure
 - C. Improve Customer Alignment
 - D. Improve Procurement
 - E. Facilitate Project Prioritization and Portfolio Management
 - F. Define Service Offerings
 - G. Improve Infrastructure and Security
- The highest-priority projects, shown in the Top Priorities quadrant and highlighted in green, are foundational in nature and must be executed from a critical-path standpoint in order for the State to be successful in achieving its goals.

Road Map

Road Map and Program Overview

■ The road map for executing the seven identified programs is presented below.





Road Map

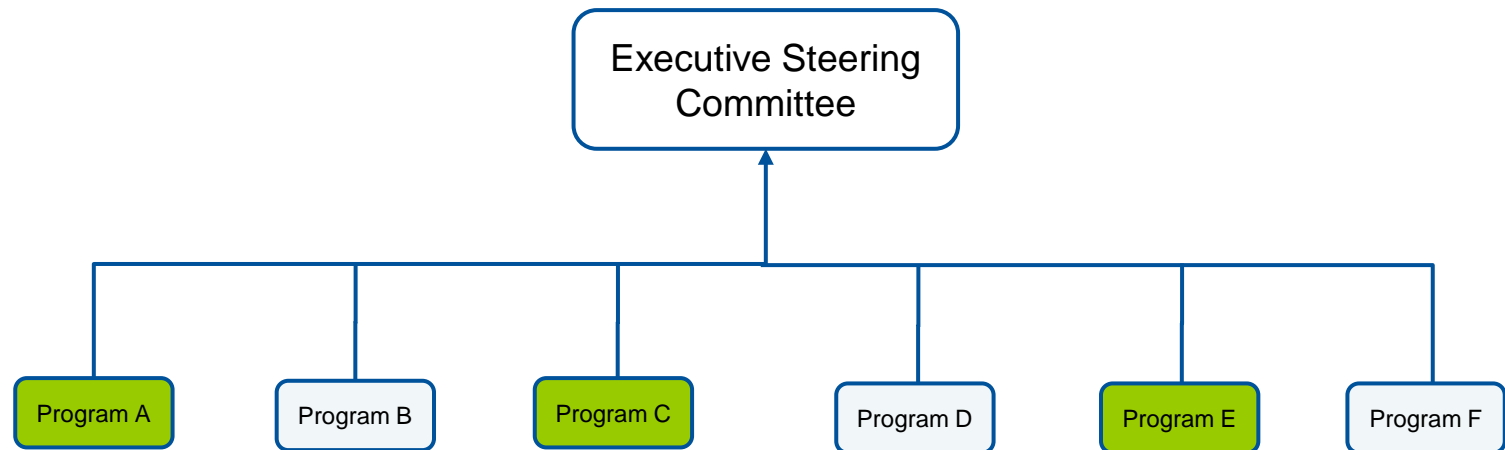
Road Map Execution, Governance and Oversight

- DTMB should explore which orientation and governance model best suits its needs. Given the similarities with synergistic enterprises, Gartner recommends enabling the following synergistic behaviors:
 - Focus on top-level, enterprisewide joint business and IT decision-making mechanisms.
 - Assess membership of top-level committees.
 - Ensure at least overlapping membership with the Executive Committee.
 - Ensure business-technology relationship managers are positioned high enough to work effectively with business unit executives.
 - Constantly review opportunities for synergy, sharing, reuse (and reward those).
 - Work with business units to educate them about common processes, components, architectures. Emphasize how it helps streamline both their business and IT decision making.
- In addition to the above behaviors, certain mechanisms have proven to be very effective in achieving efficacious governance. The top mechanisms are listed on the next slide, and should be considered when developing the final governance structure. Many of the mechanisms align with the findings, opportunities and recommendations Gartner developed as a result of the ICT assessment.

Road Map

Governance Structure

- The Governance Committee should include representatives who represent ICT as well as the business. In addition, other stakeholder groups should be considered for representation on the Committee, including budget and procurement.
- Each program must have a specified owner who is responsible for coordinating and completing each project within the program.
- Workgroup and process teams that span programs will be key to execution and effective information sharing, but the governance framework for decision making should run through the Executive Steering Committee.



Road Map

Program A: Maximize Value of ICT

- Program A is focused on increased investment in ICT, opportunities to reduce total cost of ownership, and methods to derive maximum value out of ICT data and assets.
- The potential of Program A to ultimately yield significant financial benefits is very high, but diligent alternatives and financial analysis are paramount in the short term to ensure that future investments provide the best value to the State. The projects that comprise Program A are as follows:
 - A-1: Lower Application Support Costs
 - A-2: Investigate ICT Investment Augmentation
 - A-3: Enforce Enterprise Architecture
 - A-4: Explore Cost-Saving and Value-Add Opportunities.
- The table below summarizes the estimated costs, benefits and major deliverables for the program.

Cost Estimates	Chief Benefits	Major Deliverables
External Costs: \$975K–\$1.675M (est.) Internal Costs: \$809K–\$1.48M (est.) Potential Future Costs: <ul style="list-style-type: none">■ Application Replacement■ Citizen Portal Implementation■ Data Center Sourcing■ Call Center Optimization■ Network/Broadband Enhancements	<ul style="list-style-type: none">■ Defined Application Review Process and list of near-term replacement candidates with ROI■ Sustained funding for ICT transformation and increased value to customers■ ROI model to exhibit benefits and support decisions■ Lower Total Cost of Ownership■ Foundational architecture for statewide initiatives■ Innovation improvements	<ul style="list-style-type: none">■ Documented Application Portfolio Management (APM) Process and list of initial candidates for near-term replacement■ Business case for increased funding and short-, medium- and long-term investment plan■ Enterprise Architecture Future-State Road Map and Communication Plan■ Independent Cost-Saving and Value-Add Analyses

Road Map

Program B: Transition to Target-State Organizational Structure

- Program B is focused on establishing an organizational structure that will improve customer alignment, service delivery, innovation, project portfolio management and resource allocation.
- The completion of Program B will facilitate the transition to the Target-State Functional Model. The projects that comprise Program B are as follows:
 - B-5: Redefine Customer Relationship Model
 - B-6: Establish Service Management Model
 - B-7: Enhance Responsibilities and Capabilities of ePMO
 - B-8: Create Pooled Resources
 - B-9: Establish CTO Organization
 - B-10: Improve Capabilities to Retain and Attract Talented Resources.
- The table below summarizes the estimated costs, benefits and major deliverables for the program.

Cost Estimates	Chief Benefits	Major Deliverables
External Costs: \$850K–\$1.1M (est.) Internal Costs: \$1.584M–\$2.112M (est.) Potential Future Costs: <ul style="list-style-type: none">■ Continued pooling of resources during applicational rationalization	<ul style="list-style-type: none">■ Improved alignment with customers■ Improved service delivery■ Improved resource allocation■ Improved ICT staff capabilities■ Ability to coordinate all State ICT projects■ Proactive development of innovative solutions that respond to business needs■ Improved solution consistency across the enterprise	<ul style="list-style-type: none">■ RACI models■ Revised organization charts■ Transition road map for pooled resources■ Customer service plans■ Service management plans■ Statewide innovation plan■ Updated job titles and job descriptions for ICT

Road Map

Program C: Improve Customer Alignment

- Program C is focused on improving existing customer relationships, exploring potential partnerships and addressing immediate business needs.
- The completion of Program C will improve DTMB's relationship with its ICT customers and will identify partnerships that may yield additional economies of scale. The projects that comprise Program C are as follows:
 - C-11: Enhance Current Relationships
 - C-12: Explore New Customer Partnerships
 - C-13: Address Unfulfilled Customer Requirements.
- The table below summarizes the estimated costs, benefits and major deliverables for the program.

Cost Estimates	Chief Benefits	Major Deliverables
External Costs: \$400K–\$500K (est.) Internal Costs: \$704K–\$968K (est.) Potential Future Costs: <ul style="list-style-type: none">■ Mobility solution implementation■ BI solution implementation■ Customer self-service implementation	<ul style="list-style-type: none">■ Increased customer satisfaction■ Perception of DTMB as as strategic partner to the customer■ Economies of scale for ICT procurements■ New services that address stated business needs by customers	<ul style="list-style-type: none">■ ICT strategic plans for all customers■ Documented customer satisfaction measurement process■ A formal DTMB Service and Solution Marketing Strategy■ Signed partnership agreements with new partners■ Service offerings in the service catalog for mobile and BI solutions■ An assessment of the business need and requirements for a customer self-service offering by the State

Road Map

Program D: Improve Procurement

- Program D is aimed to fundamentally improve the composition and operation of the procurement, contract management and vendor management functions within DTMB.
- Execution of Program D will introduce added standardization and efficiency into core procurement processes; create standard manuals, templates and training for State employees; and ensure that the State is getting the best value for its ICT contracts and investments.
- The projects that comprise Program D are as follows:
 - D-14: Implement Procurement Fundamentals
 - D-15: Develop Vendor Management Discipline
 - D-16: Prepare and Plan for the Procurement of an eProcurement System.
- The table below summarizes the estimated costs, benefits and major deliverables for the program.

Cost Estimates	Chief Benefits	Major Deliverables
External Costs: \$925K–\$1.6M (est.) Internal Costs: \$1.1M–\$1.8M (est.) Potential Future Costs: <ul style="list-style-type: none">■ eProcurement software and implementation■ Software licensing tracking solution, and exploration of other automation opportunities	<ul style="list-style-type: none">■ Standardized and automated processes and increased efficiency■ Improved contracts, terms and conditions■ Vendor oversight to reduce contract risk and maximize value■ Aggregated, centralized view of contracts and renegotiation targets■ Enforcement of procurement policies and rules■ Spend analysis capacity■ Baseline reporting and dashboards	<ul style="list-style-type: none">■ Documented Procurement Future Operating Model and Re-engineered Business Processes■ Procurement Manual(s) and Standardized Templates■ Vendor Management Charter, Org. Model and Staffing Plan■ Contract Management Tracking Tool/Contract Portfolio Scorecard■ Renegotiation Target Matrix■ eProcurement Business Case, Procurement and Implementation

Road Map

Program E: Facilitate Project Prioritization and Portfolio Management

- Program E is focused on establishing processes to budget, coordinate and manage ICT projects within the State.
- The completion of Program E will allow DTMB to improve the monitoring and management of large ICT investments. The projects that comprise Program E are as follows:
 - E-17: Institute ICT Investment Management
 - E-18: Improve Project Portfolio Management
 - E-19: Enhance Project Management.
- The table below summarizes the estimated costs, benefits and major deliverables for the program.

Cost Estimates	Chief Benefits	Major Deliverables
External Costs: \$500K–\$700K (est.) Internal Costs: \$792K– \$1.144M (est.) Potential Future Costs: <ul style="list-style-type: none">■ N/A	<ul style="list-style-type: none">■ The State will focus on the business benefits from ICT investments■ The State will better leverage existing resources to accommodate project demands	<ul style="list-style-type: none">■ RACI models■ Defined templates for ICT project funding requests■ ICT Project Portfolio for projects in progress and on hold■ Documented process for handling customer change requests to project scope, schedule or budget

Road Map

Program F: Define Service Offerings

- Program F is focused on preparing an enterprise service catalog with defined rates and service levels, and determining the appropriate sourcing strategy for each service.
- The completion of Program F will result in the implementation of an enterprise service catalog and a statewide sourcing strategy. The projects that comprise Program F are as follows:
 - F-20: Define Enterprise Service Catalog
 - F-21: Define and Implement Sourcing Strategy.
- The table below summarizes the estimated costs, benefits and major deliverables for the program.

Cost Estimates	Chief Benefits	Major Deliverables
External Costs: \$750K–\$950K (est.) Internal Costs: \$704K– \$1.056M (est.) Potential Future Costs: ■ N/A	<ul style="list-style-type: none">■ DTMB services will be consistently defined■ Sourcing strategy and decision model to streamline decision making and yield wiser investments■ Deep understanding of current costs/pricing in relation to market■ Ongoing model for assessing service costs and pricing vs. outsourcing options	<ul style="list-style-type: none">■ Enterprise Service Catalog■ Rate Card■ Sourcing Strategy Document■ Business Case for each service to determine immediate sourcing decisions and model for future decisions■ Road Map for Tactical Implementation of Sourcing Strategy

Road Map

Program G: Improve Infrastructure and Security

- Program G focuses on building off the past successes within the infrastructure and security domains to drive further efficiencies and adopt leading practices.
- Through the delivery of Program G, the State will institutionalize continuous improvement activities for two of its most successful disciplines, while also increasing proactive protection of State assets and data.
- The projects that comprise Program G are as follows:
 - G-21: Increase Infrastructure and Operations (I/O) Maturity and Automation
 - G-22: Enhance Security Discipline.
- The table below summarizes the estimated costs, benefits and major deliverables for the program.

Cost Estimates	Chief Benefits	Major Deliverables
External Costs: \$500K–\$700K (est.) Internal Costs: TBD Potential Future Costs: <ul style="list-style-type: none">■ I/O Automation Tools■ 24/7 Security Operations Center (SOC) implementation/augmentation cost■ Vulnerability Improvement Tools	<ul style="list-style-type: none">■ Increased efficiency of service delivery■ Lower total cost of ownership■ Identify and rectify relevant vulnerabilities■ 24/7 capability of monitoring and responding to security threats■ Decreased vulnerability	<ul style="list-style-type: none">■ Business Case for Tool Acquisitions■ Implementation of ICT Operations Tools■ Information Technology Service Management (ITSM) Road Map and Updated Documentation■ Single, or integrated, Configuration Management Database (CMDB)■ Completed Security Audit/Risk Assessment■ Establishment of 24/7 SOC Operations■ Vulnerability Improvement Plan and Acquisition of Appropriate Tools

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